JUNE 2001

FINAL REPORT

SUPPLEMENTAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR INS AND JTF-6 ACTIVITIES

LEAD AGENCY

COOPERATING AGENCY

PREPARED BY THE U.S. ARMY CORPS OF ENGINEERS
FORT WORTH DISTRICT

FINAL SUPPLEMENTAL
PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Lead Agency:	U.S. Department of Justice Immigration and Naturalization Service
Cooperating Agencies:	U.S. Department of Defense Joint Task Force-Six
Title of Proposed Action:	Proposed JTF-6 Support Services to INS
Affected Jurisdiction:	Texas, New Mexico, Arizona, and California

ABSTRACT: This document is a final of the Supplemental Programmatic Environmental Impact Statement (SPEIS) that was released to the public in 2000. The original draft SPEIS supplemented a PEIS prepared in 1994 by INS and JTF-6. The lead and cooperating agencies decided to revise and refocus the SPEIS based upon public comments and internal review. A revised draft document was released in August 2000 that focused on JTF-6 support provided to the INS rather than addressing all actions by both agencies. This Final SPEIS has been revised, as appropriate, according to comments received on the revised draft SPEIS.

The proposed action is to implement the full support from JTF-6 to the INS strategy for enforcement activities within a 50-mile corridor along the U.S./Mexico border. The enforcement activities would allow INS to gain and maintain control of the southwest border area for the purpose of enhancing in the prevention, deterrence and detection of illegal activities. JTF-6's support would fall within three major categories: operational (e.g., conduct of ground patrols Listening Post/Observation Post), engineering (e.g., design and construction of training facilities, buildings, border roads, fences, and lighting), and general (e.g., data analysis and processing, interpretation of aerial photographs). The proposed action also includes the implementation of INS' Integrated Surveillance Intelligence System (ISIS) which includes installation and monitoring remote sensing systems such as ground sensors, low level television cameras, and remote video surveillance systems. The activities proposed by INS and the support provided by JTF-6 allow INS to conduct its investigation, apprehension and patrolling activities more efficiently and effectively, thus reducing the flow of illegal drugs into the United States. This program complies with the Immigration and Nationality Act, Illegal Immigration Reform and Immigrant Responsibility Act, other INS regulations as found in Title 8 of the U.S. Code, National Defense Authorization Act and the President's National Drug Control Strategy. In addition to the no action alternative and the proposed action, three other alternatives are evaluated. The first of these alternatives addresses the use of ISIS technology and engineering support, but no operational support. The next alternative considers the use of engineering and operational support, but no ISIS technology. The remaining alternative considers the use of ISIS technology and operational support without engineering support. Additionally, two other alternatives were considered and eliminated from further evaluation: operational support only, and the use of ISIS technology only.

The official deadline for comments is 30 days after publication of the Notice of Availability in the *Federal Register*. Comments should be sent to Mr. Eric Verwers, whose address and phone number is presented below. If you would like further information about this document, please contact the following persons:

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SUMMARY SHEET FOR FINAL SUPPLEMENTAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

IMMIGRATION AND NATURALIZATION SERVICE AND JOINT TASK FORCE-SIX ACTIVITIES

( ) Draft (X) Final

U.S. Immigration and Naturalization Service
Headquarters, Facilities and Engineering
425 I Street, NW (Kevin Feeney)
Washington, D.C. 20536

Type of Action: (x) Administrative
( ) Legislative

Project Description:

This Supplemental Programmatic Environmental Impact Statement (SPEIS) was prepared by the Fort Worth District, U.S. Army Corps of Engineers in response to a request from the U.S. Immigration and Naturalization Service (INS) and the U.S. Joint Task Force-Six (JTF-6). The proposed action (i.e., preferred alternative) is to implement full JTF-6 support to INS's mission to gain and maintain control of the southwestern U.S./Mexico border. The JTF-6 support would be grouped into three support service categories: operational, engineering, and general. This support allows the INS to build the necessary infrastructure at significantly reduced costs and provides the military units with realistic training needed to prepare for National emergencies. As part of the overall enforcement strategy, INS proposes to fully implement its Integrated Surveillance and Intelligence Systems (ISIS) program. ISIS facilities provide remote sensing capabilities that provide a broader and more accurate ability to monitor illegal border activities. ISIS facilities include, but are not limited to, remote video surveillance systems, cameras, sensors, and lighting.

The purpose of the JTF-6 support and ISIS projects is to enhance the ability of INS and U.S. Border Patrol (USBP) to detect, deter, and apprehend drug traffickers. JTF-6 will continue its support to INS, in accordance with the National Defense Authorization Act. INS has been the primary beneficiary of a significant amount of the JTF-6 support to date and, therefore, is the lead agency for the preparation of this SPEIS. This SPEIS updates a previous Programmatic EIS (PEIS) prepared by INS and JTF-6 in 1994. The 1994 PEIS addressed actions completed prior to 1994 as well as those expected to occur from 1994 to 1999. Actions implemented since 1994 have been addressed, as appropriate, in separate, project-specific National Environmental Policy Act (NEPA) documents tiered to the 1994 PEIS.

INS will enhance its operation, programs and staff through increases in agents' presence, facilities, and infrastructure during the next five years, as specified in the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) of 1996, as amended. In order to accommodate these new initiatives it will be necessary to provide support and to ensure that agents would be able to effectively and efficiently perform their duties. Support facilities and infrastructure proposed by INS include, but are not limited to:

- administrative buildings,
- roads and fences,
- checkpoint stations,
- lighting,

- dog kennels and horse stables,
- helipads

Support actions provided by JTF-6 to INS are grouped into three major support service categories, as indicated above: (1) operational, (2) engineering, and (3) general. These services are provided to the INS, provided that the project has a nexus to the control of illegal drugs. Additionally, support is provided only at the request of INS/USBP and upon approval by Operation Alliance, an organization of Federal, state and local law enforcement agency representatives. Types of projects that can be provided by JTF-6 under each support category are listed below.

OPERATIONAL SUPPORT:

1. Listening post/observation post
2. Ground patrols
3. Ground sensors
4. Terrain denial
5. Aerial Reconnaissance, Forward Looking Infrared Radar, and Unmanned Aerial Vehicle Support

ENGINEERING SUPPORT:

1. Road, bridge, culvert repair and construction
2. Fences and barriers
3. Training Facility
4. Helipads
5. Checkpoints and Other building Construction
6. Kennels and Stables
7. Communication Towers
8. Building Demolition
9. Lighting
10. Boat ramps and docks
11. Tunnels
12. Water well and septic systems

GENERAL SUPPORT:

1. Transportation of personnel, equipment, and materials (evidentiary or construction)
2. Data analysis and processing
3. Training seminars and courses
4. Aerial photography interpretation
5. Translation or decoding of foreign documents

Intelligence analysis

Summary of Major Environmental Effects:

Implementation of the preferred alternative would result in the alteration of approximately 6,900 acres of wildlife habitat during the next five years. The cumulative effect of INS/JTF-6 actions since the inception of JTF-6 (1989) would be approximately 10,600 acres of vegetation being altered. Most of these effects have occurred or would occur within semidesert grasslands and/or scrublands, primarily in Texas. Less than five acres of wetlands have been disturbed during this 10-year period. INS and JTF-6 would continue to make every attempt to avoid wetlands and other sensitive environmental resources on future projects.

INS and JTF-6 coordinate with the appropriate resource agencies to ensure that effects to threatened or endangered species are avoided. Three accidents have occurred since 1989 that affected three different protected species. Only one incident has occurred since 1994. This incident involved inadvertent fill activities within a vernal pool complex in San Diego County. JTF-6 took immediate actions, in coordination with the U.S. Fish and Wildlife Service (USFWS) and U.S. Environmental Protection Agency (EPA), to restore the community supporting the species and, after a 2-year monitoring study, it was determined that the population had been restored to or above pre-project levels. INS is currently consulting with the USFWS and other pertinent agencies to mitigate for planned impacts to sensitive species and habitats relative to the construction of a multi-tiered fence in San Diego County, California and for proposed actions within the McAllen Sector (Texas).

Since 1994, no pertinent cultural resources site or structure has incurred significant impacts as a result of INS or JTF-6 actions. Over 100 new sites potentially eligible for listing on the National Register of Historic Places have been identified as a result of INS/JTF-6 projects. Due to the policy of avoidance employed by INS and JTF-6, no long-term or cumulative impacts to cultural resources are expected. In the event avoidance is not possible, testing, excavation and mitigation have been employed and coordinated through the appropriate State Historic Preservation Office and/or Native American Nation.

Impacts to air quality, noise, and water supply and quality have been temporary and minor. Since the projects proposed under the preferred alternative are similar in type, number and magnitude to those that have been completed, no long-term or cumulative adverse impacts to these resources are anticipated.

Soil erosion can occur around construction sites. However, implementation of Stormwater Pollution Prevention Plans and best management practices would alleviate the potential of soil erosion. Further, most of the road improvement projects undertaken by INS and JTF-6 are required due to existing soil erosion that has made roads used for patrol impassable. Consequently, such road improvement projects actually decrease soil erosion problems and the indirect effects to aquatic environs through sedimentation.

Implementation of the preferred alternative would produce insignificant and temporary, direct economic benefits at the local and regional level. These benefits would be realized through purchase of construction materials, other project-related expenditures, and temporary labor. Long-term indirect socioeconomic benefits would result from the reduction of drug trafficking and the social costs associated with such activities.

Areas of Controversy:

Two primary areas of controversy remain. The loss of habitat within the border region is considered by some organizations to be a major effect. While 10,600 acres appears to be a substantial amount of land, it should be emphasized that the project area encompasses about 40 million acres. In addition, the majority of the projects completed and/or proposed are road improvement projects; thus most of the 10,600 acres has been disturbed previously. A reduction in illegal foot and vehicle traffic would also have indirect benefits to wildlife habitats.

The participation of military units in the control of illegal drug trafficking along the southwestern border has raised some controversy. Department of Defense participation in counterdrug operations has been directed by the National Drug Control Strategy and authorized by the U.S. Congress under the National Defense Authorization Act of 1991 (Public Law 101-510, as amended). Still, several alternatives presented in the SPEIS, as discussed below, address various combinations of differing levels of JTF-6 support.

Within some sectors of the USBP, routine daily operations have been the focus of some concerns, particularly in regards to trash/litter control and community relations. However, these issues are beyond the

scope of this SPEIS. INS has initiated training and education programs with the intent to address such issues.

Summary of Other Alternatives Considered:

In addition to the preferred alternative, six other alternatives, including the no action alternative, were considered. Two alternatives were eliminated from further analysis as not viable. Consequently, the SPEIS addresses the impacts associated with five viable alternatives. The second viable alternative provides full JTF-6 support activities, but without any of the ISIS facilities. The third alternative carried forward for impact analysis provides only JTF-6 operational support and implements the INS ISIS program. The fourth viable alternative involves providing JTF-6 engineering and general support (i.e., no JTF-6 operational support), as well as full implementation of the INS ISIS program. The fifth alternative is the "no action" alternative. Implementation of the latter would essentially require that INS attempt to continue to enforce the immigration and counterdrug laws with no additional support infrastructure, no increase in staff deployment or facilities, and no remote sensing capabilities.

While a reduction in the scope of the INS ISIS actions (Alternative 2) would still allow some enhancement of INS and USBP's enforcement actions, the agencies would not be as efficient or effective as they should be. In addition, the full intent and purpose of Congressional mandates, INS' mission, and the National Drug Control Strategy would not be satisfied. Implementation of the third alternative would eliminate the majority of direct disturbances to wildlife and habitats. However, the ability to deter and apprehend illegal immigrants and drug traffickers would be greatly reduced. Additionally, military units would receive less extensive and/or less realistic training under this alternative. The fourth alternative would produce adverse and beneficial effects that are similar to the preferred alternative, although they would be slightly less due to the elimination of the operational support activities. By not allowing JTF-6 operational support activities, however, the deterrence and detection of illegal drug trafficking would be reduced. Continuation of the INS program as status quo (No Action) would not satisfy the agency's mission, or the intent of the U.S. President, Congress, or Secretary of Defense in their combined efforts in the "War on Drugs". The socioeconomic benefits of the INS and JTF-6 program, both real and intangible including regaining control of the border, would not be realized under the no action alternative.

Public Involvement:

Ten (10) public scoping meetings were held along the U.S./Mexico border during the period August-November 1998. A scoping meeting also was conducted in November 1998 with Federal and state resource agencies. A Draft SPEIS was circulated to: Federal and state congressional delegations; Federal, state and local resource and environmental regulatory agencies; state and local public officials; regional and local libraries; environmental organizations and members of the general public who requested copies or who were included on previous mailing lists. The Draft SPEIS was also placed on the Fort Worth District's Homepage, which allowed the Draft SPEIS and supporting baseline documents to be viewed electronically or downloaded to remote computers.

Because of comments received on the 1999 Draft SPEIS, INS and JTF-6 determined that the scope of the SPEIS was too broad and decided to provide a more narrow focus in the SPEIS. This redirection required that the alternatives be reformulated and, as a result, INS and JTF-6 felt that the document should be resubmitted to the public for review and comment. A revised Draft SPEIS was prepared and released for public review in August 2000.

This Final SPEIS is being submitted to the public for a 30-day comment period. Comments received on the revised Draft SPEIS have been incorporated, as appropriate, to the Final SPEIS. Hard copies of the document were sent to local and regional libraries throughout the study area and to appropriate Federal and

state agencies. In addition, the Final SPEIS has been placed on the Fort Worth District's Homepage and can be accessed at the following URL address: www.swf.usace.army.mil/ins/peis/default.html. Notices of Availability have been published in local newspapers throughout the study corridor and the *Federal Register*. The official closing date for receipt of public comments on the Final SPEIS is 20 days after the Final SPEIS is filed with the EPA and the Notice of Availability appears in the *Federal Register*.

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SECTION 1.0
INTRODUCTION

1.0 INTRODUCTION

The U.S. Immigration and Naturalization Service (INS) has the responsibility to regulate and control immigration into the United States. The first immigration office was established by the Federal Government in 1864. Since then the Congress has frequently passed legislation mandating procedures and controls for immigration to the United States. Such legislation also required several reorganizations of the INS including its most recent move to the U.S. Department of Justice in 1940. The INS has four major areas of responsibility: (1) facilitate entry of persons legally admissible to the United States; (2) grant benefits under the Immigration and Nationality Act, including assistance to persons seeking permanent resident status or naturalization; (3) prevent unlawful entry, employment or receipt of benefits; and (4) apprehend or remove aliens who enter or remain illegally in the United States. In regards to the latter responsibility, the U.S. Congress in 1924 created the U.S. Border Patrol (USBP) to be the law enforcement arm of the INS. The USBP's primary function is to detect and deter smuggling as well as the unlawful entry of aliens along the nation's land borders and sea ports-of-entry (POE). With the increase in illegal drug trafficking, the USBP also has become the leader for drug interdiction between land and sea POE.

The USBP uses various facilities in its daily operations for the deterrence and detection of illegal trafficking as well as for processing aliens once an apprehension is made. Thus, training of law enforcement officers, intelligence gathering, and transportation of evidentiary material are needed. USBP often requests assistance in these activities as well as in the design, construction or upgrade of the facilities they use. Joint Task Force-Six (JTF-6) routinely provides such assistance, when requested, to USBP and numerous other drug law enforcement agencies (DLEA).

The INS/USBP is developing a strategy for operational activities and infrastructure projects to be implemented during the next five years. Because funding for these projects is not assured and because of potential future changes in law enforcement strategies, it is difficult to identify the specific location, design, and/or schedule of each project. Consequently, this Supplemental Programmatic Environmental Impact Statement (SPEIS) describes the general types of projects expected and addresses the types of impacts that would be expected from the implementation of JTF-6 support for INS projects only. Where possible, data from past projects are used to assess potential impacts of future projects relative to cumulative effects.

INS and JTF-6 have prepared site-specific environmental assessments and impact statements, in accordance with the National Environmental Policy Act (NEPA) of 1969. These NEPA documents have been tiered to a Programmatic Environmental Impact Statement (PEIS) that INS and JTF-6 prepared in 1994. In order to continue to comply with NEPA, INS and JTF-6 prepared this SPEIS addressing the cumulative effects of past (since 1989) and reasonably foreseeable projects undertaken by JTF-6 in support of INS/USBP. Once specific project details are determined, site-specific NEPA documents will be developed to analyze impacts within the program described in this SPEIS.

The vast majority of the INS projects supported by JTF-6 occur within a 50-mile corridor along the United States/Mexico border in the four southwestern states (Texas, New Mexico, Arizona, and California). This area is defined as the study area for this SPEIS, and is depicted in Figure 1-1. This SPEIS was prepared for the INS and JTF-6 by the Fort Worth District, U.S. Army Corps of Engineers (USACE) in accordance with the Council on Environmental Quality's (CEQ) Regulations for the Implementation of NEPA.

The primary sources of authority granted to officers of the INS are the Immigration and Nationality Act (INA), found in Title 8 of the United States Code (8 U.S.C.), and other statutes relating to the immigration and naturalization of aliens. The secondary sources of authority are administrative regulations implementing those statutes, primarily those found in Title 8 of the Code of Federal Regulations (8 C.F.R. Section 287), judicial decisions, and administrative decisions of the Board of Immigration Appeals. Subject to

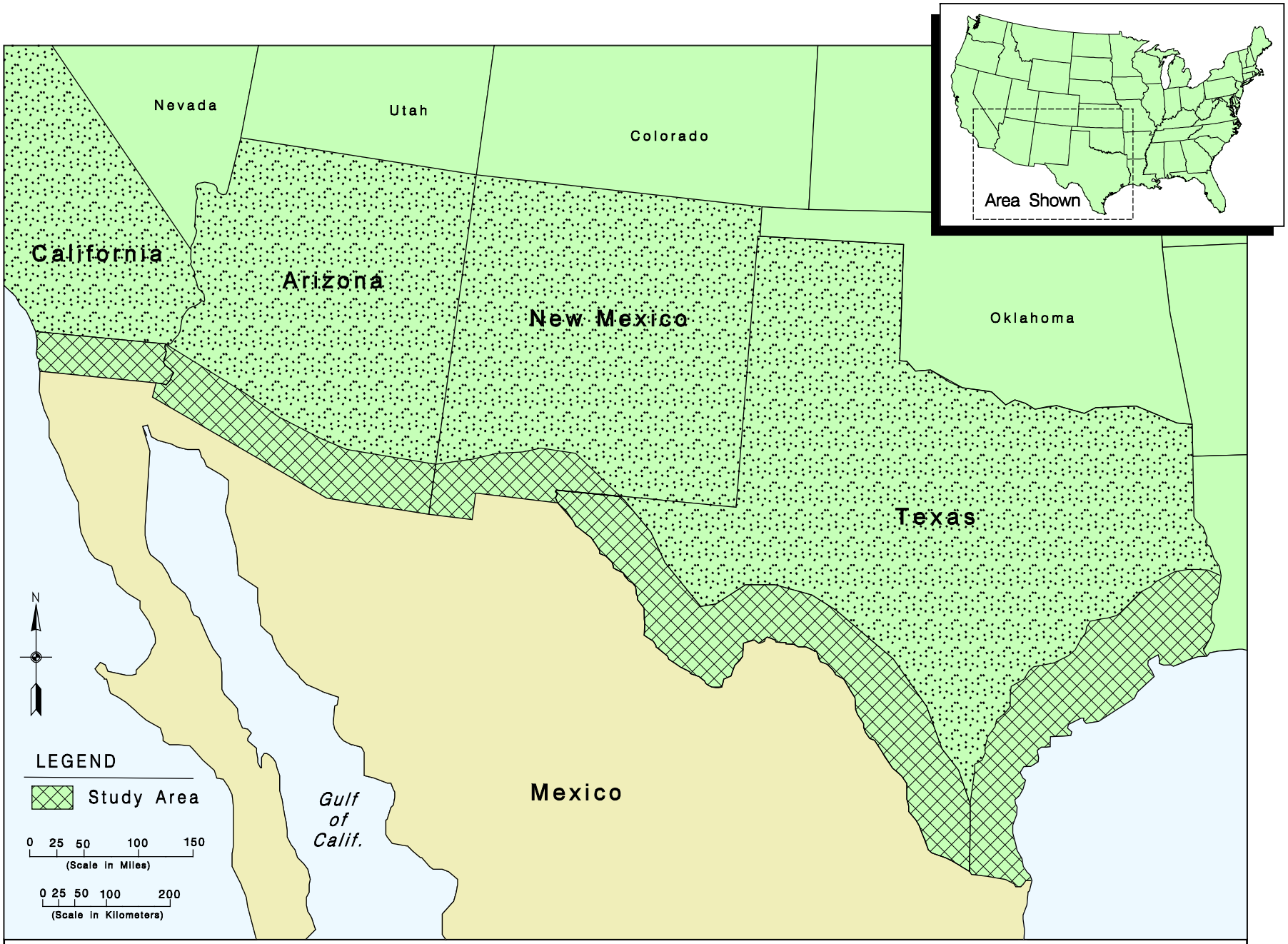


Figure 1-1. Baseline Study Area - Texas Gulf Coast and the U. S. Mexico International Land Border

constitutional limitations, INS officers may exercise the authority granted in the INA. The statutory provisions related to enforcement authority are found in Sections 287(a), 287(b), 287(c), and 287(e) (8 U.S.C. § 1357(a,b,c,e)); Section 235(a) (8 U.S.C. § 1225); Sections 274(b) and 274(c) (8 U.S.C.§ 1324(b,c)); Section 274A (8 U.S.C. § 1324a); and Section 274C(8 U.S.C. § 1324c) of the Act.

Other statutory sources of authority are Title 18 of the United States Code (18 U.S.C.), which has several provisions that specifically relate to enforcement of the immigration and nationality laws; Title 19 (19 U.S.C. 1401 § (i)), relating to Customs cross-designation of INS officers; and Title 21(21 U.S.C. § 878), relating to Drug Enforcement Agency cross-designation of INS officers. In addition, the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) of 1996 mandates INS to acquire and/or improve equipment and technology along the border, hire and train new agents for the border region, and develop effective border enforcement strategies.

1.1 BACKGROUND

1.1.1 INS History

Although an Immigration Bureau existed within the U.S. State Department between 1864 and 1868, prior to 1890 most immigrants were processed into the United States by the individual states rather than the Federal government. By the 1890s, however, the influx of immigrants into the United States, particularly New York, continued unabated. A year later, Congress passed the Immigration Act of 1891, the nation's first comprehensive immigration law. It created the Bureau of Immigration within the Treasury Department and placed the Commissioner of Immigration in the port of New York, officially ending state control and processing of immigrants.

Immigration reached its peak during the first decade of the twentieth century with 8,795,386 immigrants nationwide. The Bureau of Immigration was transferred to the Department of Commerce in 1903. The highest number of immigrants to the United States in any one year occurred in 1907 when 1,285,349 arrived. Congress acted to control the flow with the passage of the Immigration Act of 1917, which established a literacy test for the first time and made the existing mental and physical examinations more stringent. The increased stringency of these examinations and new health requirements, together with security regulations resulting from World War I, restricted immigration. The number of immigrants dropped significantly from 1.2 million in 1914 to an average of about 300,000 during each of the war years to only 110,000 in 1918. Immigration rose again after the war, to 430,000 in 1920, and 805,000 in 1921, leading Congress to enact legislation in 1921 and 1924 to limit the number of aliens allowed into the country. The new legislation imposed the first substantial restrictions on immigration by setting numerical quotas for admissions by nationality. During the Great Depression, those leaving the country outnumbered immigrants for the first time in history. The depression caused fewer people to migrate to the United States and caused more people to be denied admission. In 1930, 20,000 illegal aliens were deported because of the high number of jobless Americans.

Immigration increased again as the economy recovered, during World War II, immigration again fell sharply. In the postwar period, the numerical quota system continued under amendments to the Immigration Act of 1924 and the Immigration and Nationality Act (INA) of 1952. Immigration increased quickly after the war, however, partially because of new legislation that relaxed or waived some quotas to allow immigration of war brides, refugees, and orphans. The Displaced Persons Act of 1948 and the Refugee Relief Act of 1953 were among those acts.

Until the 1960s, the majority of immigrants to the United States came from Europe, with smaller numbers coming from Asia and other countries in the Western Hemisphere. In the 1960s the national origins principle of determining immigration quotas was discontinued after 40 years of use. During the 1960s and 1970s, various legislation allowed for the immigration of refugees fleeing from political upheavals in specific countries and fleeing due to fear of persecution because of race, religion or political beliefs. It was also during this period that the Immigration and Nationality Act was amended in October 1965, placing the first numerical ceiling on the total number of immigrants into the United States, but abolished quotas by nationality. The new system provided an annual ceiling of 290,000 (later reduced to 270,000 in 1980 by Congress).

Since 1980, an average of 150,000 immigrants have been naturalized every year. At the same time, however, undocumented aliens have become a significant issue. INS apprehension rates are currently averaging more than one million undocumented aliens per year throughout the country. The INS estimates that there are currently from three to six million undocumented aliens in the United States. Other studies have indicated higher numbers, closer to 10 million. For the past several years, Mexicans have comprised the largest number of legal as well as illegal immigrants to the United States.

More specific to this document, however, is the INS/USBP role in detecting, deterring and apprehending illegal drug traffickers. The United States is experiencing epidemic levels of drug use and drug-related crime as reported by the Office of National Drug Control Policy (ONDCP) (1998 and 1999):

- illegal drugs cost our society approximately $110 billion annually;
- 1.5 million Americans were arrested in 1997 for violating drug laws;
- 819 persons per 100,000 population were murdered during drug related offenses;
- 322,000 Americans are casual heroin users and over 800,000 are heavy users;
- 1.5 to 3 million Americans are casual cocaine users and over 800,000 are heavy users; and,
- over 10 percent of Americans used some form of illegal drug during 1999.

Additional evidence of the increasing drug trafficking problem requirements is that the USBP stations along the United States/Mexico border experienced a 19 percent increase in the number of drug seizures from fiscal year (FY) 1998 to FY 1999 and a 30 percent increase since FY 1995 (Table 1-1). More importantly, the value and number of drug seizures along the southwestern border represent at least 95 percent of those made by the USBP throughout the nation.

In order to get a reasonable accurate figure of the amount of drugs that enter the U.S., Federal drug law enforcement agencies would have to have a source of information in every major cartel to provide information regarding what the cartels move each year. Since no agency has developed, or is likely to develop such a source, the number of tons of drugs that cross the border each year is unknown. Most estimates however indicate that about two to 10 percent of the drugs that reach the border are seized. Along the southwest border, the Border Patrol has achieved a higher level of success than other Federal agencies, making the USBP a major factor in the interdiction of drugs crossing the border. Table 1-2 provides the drug seizure data for the top three Federal agencies.

Notice that while marijuana poundage figures for the Border Patrol increased for the two-plus year period, the percentage of drugs decreased. We believe this to be a measure of the Border Patrol's success. As the Border Patrol achieved a higher interdiction rate, it forced smugglers through the Ports of Entry, causing higher Customs seizure figures.

Table 1-1
Drug Seizures along the Southwestern Border and Nationwide

	Value ($1,000)	Drug Seizures (number)	Marijuana (pounds)	Cocaine (pounds)	Heroin (ounces)
FY 1995					
Southwest	1,919,743	5,777	594,313	42,394	222
Nationwide	1,971,855	6,308	608,434	44,183	786
FY 1996					
Southwest	1,202,590	5,885	645,647	18,223	26,442
Nationwide	1,208,702	6,252	652,851	19,973	26,572
FY 1997					
Southwest	1,036,691	6,315	731,268	12,821	1,118
Nationwide	1,046,293	6,625	736,906	14,823	1,312
FY 1998					
Southwest	1,326,932	6,359	860,818	18,108	403
Nationwide	1,340,463	6,665	871,417	22,675	501
FY 1999					
Southwest	1,702,381	7,532	1,165,318	23,568	724
Nationwide	1,916,437	7,865	1,170,640	29,674	771
Total Southwest	7,188,337	31,868	3,997,364	115,114	28,909
Total Nationwide	7,483,750	33,715	4,040,248	131,328	29,942
% Southwest Border	96%	95%	99%	88%	97%

USBP, 2000.

Table 1-2 Drug Seizures along the Southwestern Border, by Year and Agency

Marijuana						
	USBP		USCS		DEA	
1999	1,212,300	66%	633,282	34%	(not available)	
2000	1,340,000	62%	761,500	35%	67,000	3%
2001	326,400	51%	282,227	44%	33,600	5%
Cocaine						
	USBP		USCS		DEA	
1999	28,070	55%	22,850	45%	(not available)	
2000	16,950	45%	14,460	39%	37,310	16%
2001	3,240	36%	5,065	56%	9,065	8%

The negative impacts of widespread drug use on society continue to affect the work force, educational system, general law and order, and traditional family values and structure (Office of National Drug Control Policy, 1998 and 1999). Rising rates of violent crime, serious damage to the Nation's health and economy, and strains on vital relationships with international allies led the U.S. Congress to develop the National Drug Control Strategy. The National Drug Control Strategy included the USBP and mandated a “prevention through deterrence” strategy. The National Drug Control Strategy also formulated a multi-year approach that required the USBP and other local DLEAs to “... gain, maintain, and extend control ...” of the border region into the United States.

1.1.2 INS Organization

INS has three executive divisions: Executive Office for Field Operations, Executive Office for Policy and Planning, and the Executive Office for Management. The Executive Office for Management, Administration Division, Headquarters Facilities and Engineering Branch, is responsible for developing and disseminating policy, setting goals and priorities, and analyzing and reporting INS-related statistics. The Executive Office for Field Operations Division provides executive direction to all INS field operations around the world.

The USBP activities are administered under the Field Operations Division. As mentioned previously, the USBP's primary function is to detect and prevent the unlawful entry of aliens and smuggling along the nation's land and water borders. With the increase in illegal drug trafficking, the USBP also has assumed the major Federal responsibility for illegal drug interdiction. In fiscal year (FY) 1999, the USBP made over 7,500 drug seizures along the southwestern border, resulting in the removal of over a million pounds of marijuana, about 24,000 pounds of cocaine, and 724 ounces of heroin from the streets of the United States (see Table 1-1 above). The combined value of these drugs was over $1.7 billion.

The USBP uses a variety of methods to detect and deter illegal drug traffickers. Deterrence is accomplished through the actual presence (24 hours per day, seven days per week) of the USBP agents on the border, fences and other physical (natural and man-made) barriers, lighting, and the knowledge that the illegal entrants will be detected and apprehended. Detection of the illegal traffickers is accomplished through a variety of low-technology and high-technology resources including observing physical signs of illegal entry (vehicle tracks and footprints, clothes, etc.), visual observation of the illegal entries, information provided by private landowners or the general public, ground sensors, and remote video surveillance systems.

The latter two items are components of INS' Integrated Surveillance Intelligence System (ISIS), which has become an integral part of the detection process, thereby enhancing the agents' ability to apprehend the illegal entrants. ISIS components include, but are not limited to, unattended ground sensors, low-light television cameras, infrared cameras, towers, (and their connections to power and communication lines), and intelligent computer aided detection (ICAD). The various remote sensing systems can be used separately or in combination with several types of systems or with other, more routine, enforcement actions (i.e., patrols). However, to be most effective, or for maximum optimization, the ISIS needs to be utilized in conjunction with other infrastructure and resources.

Sensors are typically one foot in diameter and about three inches in height and utilize radio and seismic frequencies to detect foot and/or vehicular movement. Thus, no communication wiring between sensors is necessary. Sensors are remotely monitored from a fixed location, such as a USBP station, where the signals are input to the ICAD. Information is then relayed to the USBP agents that an alarm has been triggered in a specific location. Using other components of the ISIS, even more specific information, such as number of illegal entrants, vehicle type, and travel direction, can be provided to the agents, which will enhance the potential for successful apprehension of the traffickers, and ensure the agents' safety.

Low-light television and infrared cameras are placed in high-traffic areas to assist INS in detecting illegal entrants, particularly during the night. A typical camera or video surveillance system would be installed at a height of about 60 feet on top of a concrete or steel pole, or on existing buildings and other structures (e.g., water towers). The spacing between the camera sites would depend upon the topography of the area, amount of illegal traffic, and the area needed to be monitored. Like ground sensors, video surveillance systems are usually monitored from other fixed locations and entered to the ICAD. These systems allow the INS/USBP agents to more effectively and efficiently monitor a larger area and react quicker to illegal entrants at remote locations.

1.1.3 JTF-6 Support

The National Strategy that directed the INS to "…gain, maintain and extend control…" of the border region also mandated Department of Defense (DoD) involvement in these efforts. As a result, in 1989, the Secretary of Defense (SECDEF) defined a significant role in the counterdrug effort for JTF-6. The SECDEF directed that key commanders within the various armed services develop plans identifying each of their proposed methods of providing assistance in reducing the flow of drugs into the United States. The Joint Forces Command (formerly the U.S. Atlantic Command) and Forces Command (FORSCOM) were directed to provide support requested by a Federal, state, or local DLEA to assist in the counterdrug effort within the continental United States.

JTF-6 was formed later that same year as a military command that provides assistance and support to various counterdrug enforcement agencies. This assistance is provided at sites located throughout the continental United States. JTF-6 synchronizes and integrates DoD operational, engineering, technological, training and intelligence support to USBP and other DLEA counterdrug efforts to reduce the availability of illegal drugs in the United States. JTF-6 will continue this effort, as directed by the National Defense Authorization Act (Public Law 101-510, as amended).

The mission and area of responsibility of JTF-6 has changed since 1989, however, its function has remained the same. *JTF-6 has a supporting role, rather than a lead role, to USBP and provides that support only upon request.* JTF-6 performs a wide variety of projects, as will be discussed later, at the request of the agency. These projects allow the agency to better enforce the drug laws of the various states and the Nation. The INS and USBP have been the primary beneficiary of the construction, training, and reconnaissance activities of JTF-6; however, any law enforcement agency involved in interdiction of illegal drugs may request assistance from JTF-6.

JTF-6 provides support to INS using Active duty, Reserve and National Guard units from all military components. INS entities obtain military assistance in efforts against the illegal drug trade through support requests forwarded to Operation Alliance. Operation Alliance is an organization of Federal, state, and local law enforcement representatives through which military support is made available to law enforcement agencies with counterdrug responsibilities. Intelligence data drive the request or need for support. Operation Alliance determines and prioritizes the type of support needed and forwards the request to JTF-6. JTF-6 then staffs the request and, with appropriate approval, identifies a unit that is willing and available to provide the requested support.

A Memorandum of Understanding (MOU) is signed by the respective representatives of Operation Alliance, JTF-6, the participating unit, and the requesting DLEA (e.g. USBP). This MOU identifies the work to be accomplished, the purpose and need for the project, and outlines the responsibilities of each party. Appropriate project-specific NEPA documentation, tiered to this SPEIS, must be prepared prior to initiation of the proposed project. The MOU also specifically identifies the project proponent as the responsible party for operation and maintenance of the project upon completion by JTF-6.

During the entire cycle of the project, JTF-6 maintains tactical control of the units conducting the project through a programmed array of procedural and active measures. Unit commanders and their key personnel meet with JTF-6 planners at an initial planning conference. After this meeting, JTF-6 planners and unit representatives meet at the project site with the project proponent to perform initial site planning. On-site environmental briefings are conducted with each unit prior to initiation of a project. The units receive a copy of the NEPA document, including mitigation measures, during this briefing to ensure that the project personnel are aware of sensitive issues and resources as well as any mitigative measures that are to be implemented. In-process reviews and other meetings, as well as detailed after-action reviews, ensure that

the project is successfully completed. The after-action reviews provide valuable information that is utilized for subsequent, similar actions to enhance personnel or equipment proficiency, reduce project delays, and facilitate avoidance of potential adverse impacts. Operation and maintenance of facilities constructed by JTF-6, as indicated above, remains the responsibility of the INS entity.

Upon receipt of a request from Operation Alliance, JTF-6 staff conducts an in-depth review of the request to ensure it complies with existing legal requirements before JTF-6 can accept the support request and initiate mission planning. Initially, the support request must originate from a DLEA, such as the USBP. Secondly, the DLEA must articulate a counterdrug nexus in the support request. Military personnel conducting counterdrug missions in support of DLEAs must comply with the requirements of the Posse Commitatus Act (18 USC 1385) and other applicable Federal laws and DoD regulations. Briefly, the Posse Commitatus Act prohibits military personnel from direct participation in law enforcment functions such as searches, seizures and arrests. Additionally, military personnel conducting a JTF-6 mission must adhere to Chairman, Joint Chiefs of Staff Instruction 3121-02—Rules on the Use of Force by DoD Personnel during Military Operations Providing Support to Law Enforcement Agencies Conducting Counterdrug Operations in the United States.

Finally, the project must be able to satisfy training requirements of the participating military unit. A portion of each unit's respective Mission-Essential Task List (METL) must be accomplished during each JTF-6 operation. These factors, coupled with recognizing the sensitivity of military operations that are conducted in proximity to a border with another sovereign nation (including Native American tribes along the border), require that each project be screened carefully in terms of legality and military propriety.

In addition, political sensitivities regarding potential confrontations between the United States military and law-abiding citizens living within the four-state border region must be respected and carefully evaluated prior to each operation. Approximately 50 percent of the land along the border is under private ownership, mostly within southwestern Texas. Under current legislative authority, Federal military forces must have the permission of the landowners prior to entering or conducting any operations on private lands. Additionally, any work performed by JTF-6 on public lands or Indian Trust lands must be coordinated with the appropriate resource agencies or Tribal Governments that manage or administer the lands.

Once a request is forwarded to JTF-6, they will contact various Active, Reserve, and National Guard units to determine if any are interested in volunteering to provide assistance on the proposed project. The unit's participation in the project will provide necessary training for their troops that will satisfy at least a portion of the unit’s METL. Although the troops provide construction support at no cost, the INS entity is responsible for the purchase of all construction materials.

1.2 PURPOSE AND NEED

As mentioned previously, the United States is experiencing a continued increase in illegal drug trafficking. The INS has significantly increased the number of USBP agents over the last three years in an attempt to control or halt such illegal activities. In order to maximize their efforts, various infrastructure elements are required. With the increase in agents, administrative buildings have to be expanded; more highway checkpoint stations are possible; and associated support facilities, such as vehicle maintenance shops, need to be renovated or constructed. Other items such as fences, improved roads, and ISIS components, are required to make the USBP agents’ efforts more efficient and effective.

Illegal drug enforcement operations must be flexible. As INS increases its apprehensions of illegal traffickers attempting to use a certain method to enter the United States, the criminals will change their modes of operation. In order for the INS to adjust their operations accordingly, numerous tactics, are

employed. First and foremost, manpower deficits are satisfied by temporarily re-assigning agents or adding new, permanent agents. Training of new patrol agents follows strict guidelines established by INS and includes sensitivity training. INS has also recently begun incorporating environmental awareness into their routine training programs to ensure that agents are familiar with their responsibilities for complying with environmental regulations and guidelines. INS recently cooperated with BLM and USFWS to produce an environmental training videos that have distributed to all USBP Sectors and are now part of their mandatory training programs.

The primary purpose of the proposed JTF-6 activities is to facilitate the INS missions to reduce or eliminate illegal drug activities along the borders of the United States. The USBP's strategy to control the borders of the United States identifies the southwestern border as the highest priority area. This mission is enhanced by placement and use of sensors, fences, and other systems. A secondary objective, but extremely important goal for the DoD, is to provide training opportunities for Active, Reserve, and National Guard units in deployment and redeployment, logistics and design planning, construction of roads and buildings, intelligence data gathering and analysis techniques, field observation techniques, navigation techniques, and other requirements of each participating unit's METL. These activities are meant to increase and improve the readiness of these units in the event of a National emergency.

JTF-6 provides support to the INS, only after requests for its support or assistance have been made through Operation Alliance and only to those projects which have illegal drug control purposes. The Posse Commitatus Act prohibits the use of Federal Active and Reserve armed services personnel from conducting police actions (i.e., search and seizure, arrest, detention, investigation, etc.). Consequently, the support provided to the INS entities involves operational, engineering, and general support activities that do not require the troops' direct involvement in arrests and convictions. In addition, since 1997, no units have been armed while performing JTF-6 projects. Although many of the projects are conducted in areas that pose a significant security issue for military units, JTF-6 relies on the INS entity to provide security for the military personnel.

1.3 DESCRIPTION OF THE PROPOSED ACTIONS

The National Drug Control Strategy (in addition to the INS National, regional and field strategies), as mentioned previously, has focused attention on the southwestern United States. The number of USBP agents is expected to significantly increase during the next 10 years. In order to accommodate these new agents, support staff, resources, and continued assistance from JTF-6 would be sought.

Infrastructure would need to be constructed or improved to ensure that these agents can effectively and efficiently perform their duties. Support would also be needed in training, intelligence gathering, detecting and deterring illegal activities, and administrative functions such as transporting evidentiary materials seized by USBP during drug busts. INS must provide this support to its law enforcement arm (USBP) in order for the USBP to effectively implement the strategy for gaining and maintaining control of the border. An integral part of providing these means to effectively operate is the assistance INS receives from the DoD, particularly in regards to JTF-6 support missions. The types of assistance that JTF-6 provides to INS and USBP can be categorized into three groups:

- operational support services
- engineering support services
- general support services

Each of these support categories is discussed in the following paragraphs. Examples of the types of projects that could be implemented under each category are also provided.

1.3.1 Operational Support Services

The majority of operational support activities require approval of the SECDEF for each specific action proposed. Examples of operational support that requires SECDEF approval include listening post/observation post (LP/OP), ground patrols, ground sensors, terrain denial, unmanned aerial vehicle (UAV) reconnaissance, and forward-looking infrared radar (FLIR) missions. Manned aerial reconnaissance missions do not necessarily require SECDEF approval if certain criteria are met.

1.3.1.1 Listening Post/Observation Post

LP/OP support services provide additional personnel to USBP for observation or reconnaissance of areas that have high potential for illegal drug smuggling activities. LP/OP missions would typically last from five to 30 days and may include a company of up to 120 military personnel who would serve on alternating teams of two to four personnel. Typically, no more than 30 personnel would be at LP/OP positions at any given time during a mission. These 30 personnel would be deployed at five to 15 LP/OP sites (2-6 persons/site) for up to 96 hours, during which time they remain at the LP/OP site. Operations at the actual LP/OP site generally consist of a team that has selected a high observation point (which can be a building along the border or a high point of ground) from which the team attempts to observe illegal drug activities. Illegal activities include unauthorized aircraft flights into the United States, which would be detected by radar or visual observations from the LP/OP site. If illegal activities are observed, the military unit calls the USBP for enforcement action. The military unit does not participate in the enforcement action other than the initial report to the USBP. Access to the LP/OP sites may be by a 4-wheel drive vehicle, by foot if roads/jeep trails to the site are non-existent, or by helicopter insertion. The motor vehicles remain on established roads or other disturbed areas and are not driven cross-country. Established roads or jeep trails include those which have been sufficiently traveled to have kept vegetation cropped to a level or width sufficient for vehicle passage or to have left dual tracks that are readily visible from the ground or from an aerial platform.

The LP/OP unit utilizes binoculars, cameras, and night vision devices to allow 24-hour observation periods. LP/OP sites are left intact with no litter and, to the maximum extent practicable, no significant damage to natural habitats or cultural resources. Refuse and other solid wastes are removed from the site and disposed of in strict accordance with Federal, state and local regulations.

Occasionally, USBP may request that the LP/OP site be established as a permanent site to allow routine but periodic observation activities. Permanent LP/OP sites require digging a 12 x 12-foot (maximum) hole at the site and placing a removable, camouflage cover on top. By providing these support services, the LP/OP unit receives actual and realistic field reconnaissance training that would facilitate their combat readiness.

1.3.1.2 Ground Patrols

Ground patrols involve 10 to 12 military personnel traveling on foot with the intent of discovering illegal drug activities such as cultivation of marijuana. Proper coordination with and approvals from the appropriate resource agency are required before the units enter any public lands. Use of private lands requires the expressed written permission of the landowners through a Right-of-Entry document. The units may establish field campsites each day, but would police their campsites each morning before leaving to ensure that no visible evidence of their presence exists. No large mess or other bivouac facilities are associated with this type of support activity. In fact, ground patrol units typically utilize established campgrounds or military

bases for sleeping facilities during ground patrol exercises. If illegal activities are observed during the ground patrols, they are reported to the USBP for enforcement action. Ground patrol units receive training in terrain navigation, camouflage, and observation/detection techniques.

1.3.1.3 Ground Sensors

Military personnel would only go out to the site to emplace, remove, or maintain a ground sensor as part of another training mission such as an LP/OP or ground patrol. When doing so, they would be escorted by the sponsoring USBP agents. Sensor missions typically last from five to 30 days. Deployment of sensors requires training for units which use them in "war-time" roles. When a sensor detects activity, the unit notifies the USBP agents, who respond to investigate. These sensors are similar to those employed by the USBP, but they are not a component of the ISIS program.

1.3.1.4 Terrain Denial

Terrain denial support can occur on public lands or on private lands but only after receipt of a Right-of-Entry document. Terrain denial support is provided when the USBP determines that potentially significant illegal actions would occur within a given area and time. Terrain denial operations are designed to deter entry of drug traffickers into the United States. Terrain denial support activities typically involve 150 soldiers encamped at various locations along the border for a duration of about 30 days. The actual number of personnel may range from 60 to 600; however, any JTF-6 operation that requires over 450 military personnel must first receive approval from the SECDEF. Each base camp may be occupied by 50 to 60 soldiers. A Tactical Operations Center (TOC) comprised of 30 to 40 people may also be part of the terrain denial operations. The TOC would have generators, tents, vehicles, a radio antenna and other miscellaneous communication and maintenance/support equipment. The TOC area usually encompasses from two to five acres; however, vegetation would be not be removed, cut or otherwise cleared unless absolutely necessary. This decision would be the responsibility of the unit commander. Even though this type of support is authorized, JTF-6 has not received a request for terrain denial support since 1995. Any new requests for terrain denial support, regardless of the size, would require SECDEF approval.

Platoon size (45 soldiers) foot or wheeled patrols within specified border areas would be conducted. These patrols serve the same purpose as the ground patrols, described above; however, other illegal activities may also be detected and reported. If equipment maintenance is required in the field, troops utilize a 4-millimeter plastic sheet under the vehicle or other equipment piece to reduce or eliminate spillage of petroleum, oils or lubricants (POL) onto the ground. Any spillage must be removed, transported back to the base camp and reported in accordance with DoD regulations. Absorbent materials would be maintained by each unit in case of accidental spills in accordance with their respective Spill Prevention, Control, and Countermeasures Plan (SPCCP).

1.3.1.5 Aviation Reconnaissance

Aerial reconnaissance missions are used to detect illegal drug traffic (ground or air), marijuana crops, drug facilities, and other illicit drug activities. Aircraft used for such missions can be manned or unmanned. Manned aircraft can either be fixed-winged or helicopters. Manned reconnaissance missions would usually be staffed with four to 20 military crew members. The crew flies over specified target areas in an attempt to identify illegal drug activities, usually at altitudes of 500 feet above ground level or higher.

Unmanned aerial vehicles (UAV) are small, self-propelled planes with a wingspan of 17 to 50 feet. The UAV is guided over the target area by remote control. Each UAV is equipped with a camera (day or night

vision) and/or forward looking infrared radar (FLIR), which allows the controller to guide the UAV over specified targets and detect/record illegal activities.

Whenever illegal drug activity is observed by either manned or UAV missions, the information is forwarded immediately to the USBP for appropriate actions. All missions are coordinated with the regional Federal Aviation Administration (FAA) prior to initiation of the mission to ensure air traffic safety.

1.3.2 Engineering Support Services

This support category includes engineering design, renovation, and/or construction of various facilities that are routinely needed by the USBP. The majority of these activities involve rehabilitation or upgrading of existing facilities, although some new construction is provided. At the present time, engineering support services comprise about 40 percent of the JTF-6 budget for the three support areas; however, these services represent less than seven percent of the overall number of missions performed by JTF-6. Engineering support services provide training for the troops in deployment and redeployment of construction units and equipment, construction of various types of facilities that may be required in combat emergency situations, and coordination and planning activities.

1.3.2.1 Road, Bridges, Culverts, and Low Water Crossings

USBP agents patrol thousands of miles of southwestern United States border roads each day. Various forms of transportation are used while patrolling these roads, including 4-wheel drive vehicles, bicycles, motorcycles, foot, and horses. Some agents are stationed at specific observation points that provide an unobstructed view of the border area, while others drive along pre-determined routes. The majority of the dirt roads within the border region were about 24 feet wide when originally built. Over the years, vegetation has encroached to the point that these roads are now typically less than 10 feet wide. In addition, most roads have experienced severe wind and water erosion that has resulted in long, impassable stretches. The current conditions of these roads do not allow efficient use of the roads by the USBP. Their condition prohibits adequate enforcement actions within large regions. Bridges, culverts, low water crossings, gabions, water bars, and other drainage or erosion control structures are designed and emplaced to reduce erosion and concomitant road maintenance activities. These roads are used as patrol routes, drag roads for detection of potential illegal entry, and fire breaks. Drag roads are dirt roads that are smoothed out by dragging (hence, the name) tires or other materials behind a vehicle. The intent is to clear the road of all previous sign of illegal traffic so that agents can detect when new signs appear.

These types of construction activities have represented, and are expected to represent, about 40 percent of the engineering work performed by JTF-6. As mentioned previously, most of the border roads have deteriorated due to erosion and/or vegetation encroachment. JTF-6 actions typically involve upgrading or repair of these roads to a width of 20 feet with parallel drainage, where appropriate. JTF-6 makes all practicable attempts to avoid construction of new sections of roads; however, severe erosion within and near some drainage basins has necessitated construction of some new sections. The total length of new sections constructed to date is estimated to be less than 55 miles. Since 1989, nearly 1,517 miles of existing roads have been evaluated for upgrading. The 1,517 miles represent an average of about 150 miles per year. About 5-10 percent of this 1,517 miles of road was repair or upgrade of roads that were previously repaired by JTF-6. Not all of these projects were completed, however, due to time, budget, and/or manpower constraints, or because the project was re-designed during the construction phase. The re-upgrades were necessary to provide better drainage structures and/or to provide a more stable design. During the next five years, up to 2,116 miles are expected to be upgraded. It should be emphasized that not all road projects are parallel or adjacent to the border.

1.3.2.2 Fences and Barriers

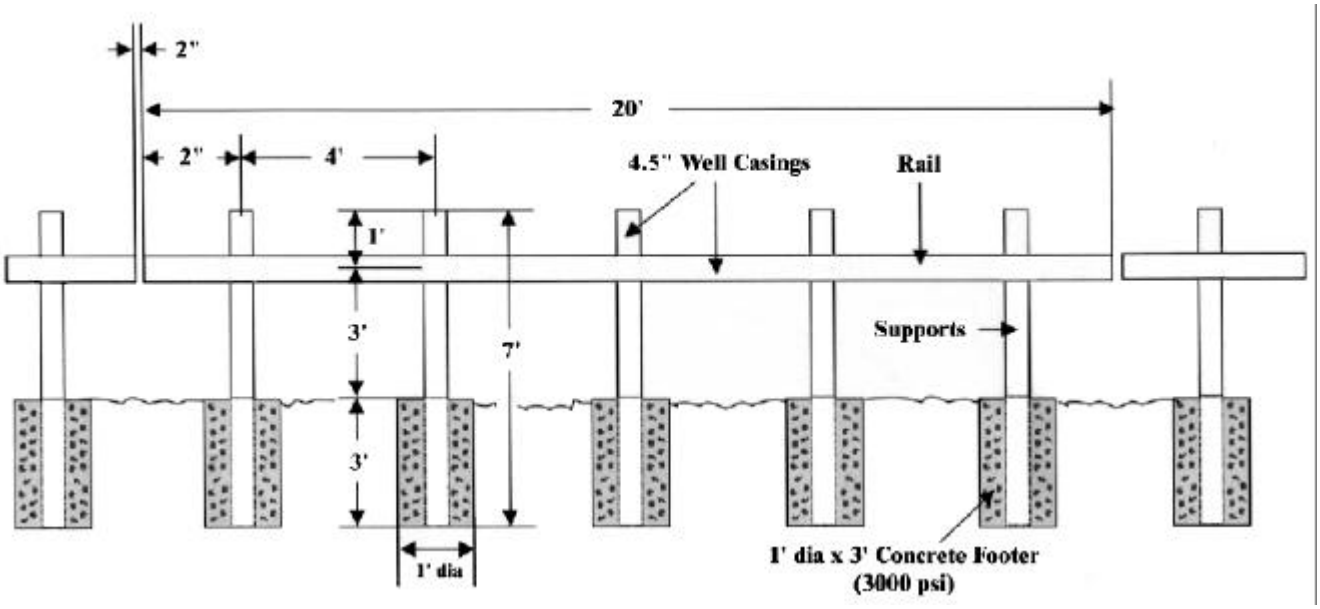
Although virtually the entire United States/Mexico border has at one time or another been demarcated by some type of fence, the border fences constructed by and proposed by INS are located mostly in urbanized areas near land POEs. Much of the existing international fencing consists of barbed wire or chain link fence and is in various states of disrepair. Maintained border fences, particularly near land POEs, can be an effective deterrent to illegal drug trafficking. Fencing also facilitates enforcement actions by hindering escape or funneling illegal traffic into selected areas. Several types and styles of fences have been constructed by INS and JTF-6 including metal Sandia fences, concrete bollard fences, solid steel landing mat fences, and wrought iron decorative fences (Exhibit 1). These and other styles would continue to be designed and constructed depending upon the region's need, soil conditions, and budget constraints.

Barriers are generally used to prohibit illegal vehicle entry. Barriers are constructed of metal and/or concrete post and railings at heights that would not allow vehicles to pass under or over them (Figure 1-2). Such barriers do not impede wildlife migration. Most barriers are constructed in remote areas that have experienced high illegal vehicle traffic. Some barriers are installed at POEs to prevent vehicles from crashing through normal security systems and escaping into Mexico or the United States.

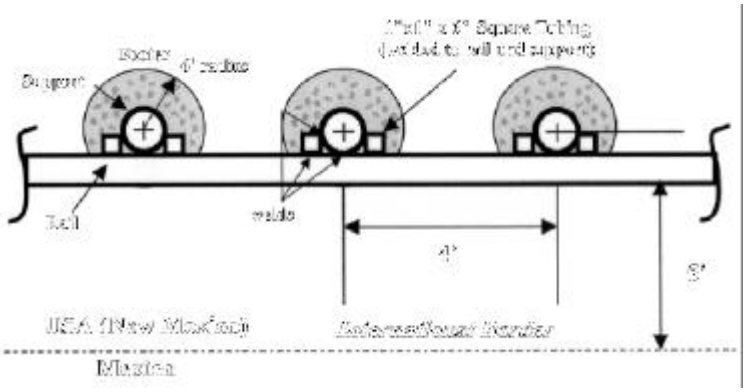
JTF-6 has been involved in the construction or repair of approximately 57 miles of border fencing since 1989. The construction right-of-way (ROW) is generally less than 30 feet wide, which includes a parallel maintenance road. However, in some areas (i.e., San Diego) fence corridors have been established which required up to an 800 ft. ROW. In the San Diego area, a barrier system is being constructed that involves a "primary" fence along the border and a parallel "secondary" fence. The width between these fences can vary depending upon topography and enforcement strategy. To date, JTF-6 fence construction has usually involved welding solid steel matting (excessed air landing strip mats) to solid steel poles with concrete footings. Construction of this type of fence has mostly eliminated the problem of illegal traffickers driving through border fences. Alternate designs and materials may be used, based on the needs of INS, as well as the cost of materials. Other engineering actions that may be required as part of the fence construction include installation of culverts and filling of eroded sections of roads. Roads are built immediately adjacent to the fence and entirely within the construction ROW.

1.3.2.3 Training Facility Construction

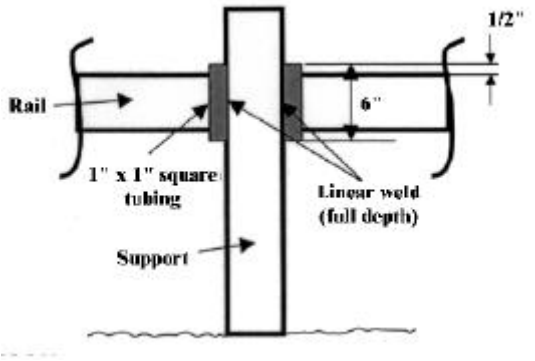
Weapons training ranges are used by USBP to allow their officers to maintain firearm proficiency and to satisfy their weapons qualifying requirements. JTF-6 units have participated in weapons training range construction/upgrading which usually consists of installation of earthen berms around existing ranges for safety and protection of the firing range users as well as the general public. New firing ranges, encompassing five to 10 acres, also have been constructed in some areas where access to other firing ranges was limited and, thus, USBP agents were not able to properly train in firearm operations and proficiency. When new firing ranges are needed, they are designed to support multi-agency use by several DLEAs. Borrow material for construction of the firing ranges is obtained from the range site, where possible. Small caliber bullets from semi-automatic rifles, shotguns and pistols are used at these firing ranges. Plastic sheeting is typically placed under new berms to alleviate the potential of lead leaching into groundwater supplies. The USBP is responsible for the operation and maintenance of the firing range. The multi-agency firing ranges may be utilized daily by several Federal, state or local agencies.



MEXICO SIDE PERSPECTIVE



TOP PERSPECTIVE



USA SIDE PERSPECTIVE

Adapted from MAJ Scott A. Spellmon, 22 DEC 99

Figure 1-2: Schematic Drawings of Vehicle Barrier

GULF SOUTH RESEARCH CORPORATION

SCALE: not to scale

DATE: June 2001

Some weapons training facilities require construction of shooting houses, which are used to train USBP officers in entering houses and other buildings under emergency situations. A shooting house facility is usually constructed in conjunction with firing ranges. These structures are generally 10 to 12 feet high with no roofs. The USBP requires stringent physical training for their field agents and most are required to pass periodic fitness tests. JTF-6 has incorporated into some training facilities, fitness and obstacle courses to assist USBP in their routine physical training programs. Some parts of these facilities, such as rappelling towers, provide additional training other than just physical fitness. Fitness/obstacle courses usually are built near or adjacent to existing INS/USBP facilities; the area required for the course would depend upon the type of course desired, the training needs of the USBP, available lands, and budget. Borrow material, if any, is obtained on-site whenever practicable.

1.3.2.4 Helipads

INS uses fixed-wing aircraft and helicopters to perform reconnaissance and detection operations; these assets are also employed to support the ground patrols. Hangar facilities for both types of aircraft are generally leased from existing airports. Refueling of aircraft generally occurs at the established airport locations or, in some instances, at USBP stations or other INS facilities that are equipped to support aircraft activities.

Due to the remote nature of much of the southwestern United States, helipads are necessary to serve as mission stationing points to support INS reconnaissance, observation and enforcement activities, as well as JTF-6 aerial reconnaissance missions. Helipads are typically constructed with concrete but can consist of matting or sandbags filled with eight percent cement. Stone riprap and/or sandbags are also used around the perimeter of the helipad for stabilization and to reduce erosion caused by the helicopter's prop wash. A helipad typically encompasses an area about 120 x 120 feet, including the prop wash protection area, and often times is located in proximity to an INS base of operation. No POL are stored on-site at remote helipad sites. However, INS facilities and JTF-6 units maintain equipment (e.g., absorbent materials, fire extinguishers, etc.) for the containment of POL spills.

1.3.2.5 Checkpoints and Other Building Construction and Rehabilitation

Checkpoints are located several miles from the United States/Mexico border along major highways. Checkpoints can be manned 24-hours per day in high illegal trafficking areas or randomly to allow surprise inspections. These facilities usually require less than five acres. Permanent checkpoints consist of processing offices, temporary detention facilities, administration offices, potable water supply, and sewage systems. Temporary kennels may be located at those checkpoints where K-9 units are used. JTF-6 has also been involved in the rehabilitation of existing buildings to upgrade the structure to building code standards or to convert the building to other uses. New construction may also be requested and could involve construction of parking ramps and lots, taxiways, small office buildings, and storage or maintenance sheds. New building construction activities would typically occur within or adjacent to existing INS/USBP facilities.

1.3.2.6 Kennels and Stables

Dog kennels, to support K-9 units, and horse stables are also expected and would typically be associated with the administrative facilities or checkpoint stations. Dog kennels generally would require less than one acre and be constructed with chain-link fencing and concrete pads. Waste would be washed into septic systems or, where possible, into municipal sewage systems. Horse stables would usually require less than

two acres, depending upon the number of horses maintained and the amount of available pasture or rangeland. Stables would be constructed with wood and metal. Collection systems for stormwater runoff would be designed and constructed for new stables, as appropriate.

1.3.2.7 Communication Towers

Communication towers are permanent facilities used by the USBP for the installation of cameras, radio transmitters/receivers, or motion detection devices. Many of the towers would require construction of a concrete/concrete block building to house electronic equipment associated with the communication operations. Communication towers are typically built adjacent to a USBP facility; however, some towers have been constructed by JTF-6 in remote locations, usually on tops of ridges, to enhance relay of radio transmissions and provide remote surveillance operations.

1.3.2.8 Building Demolition

Illegal drug laboratories and other unauthorized structures often are discovered by DLEAs on public lands. At the request of the INS/USBP, JTF-6 can provide demolition and removal services. Demolition of buildings generally is accomplished using heavy equipment (e.g., bulldozers, etc.) and/or hand tools. Prior to initiation of demolition activities, the requesting INS entity is required to perform an Environmental Baseline Survey or a Phase I Environmental Site Assessment to determine the presence of hazardous materials, clear land titles, and any other potential environmental liability. These liabilities, if they occur, are resolved by the requesting INS entity before deployment of the JTF-6 sponsored unit.

1.3.2.9 Lighting

Lighting is often used in urban areas to deter illegal activities during nighttime periods. The placement, number, size, and design of the lighting and light standards depends on local circumstances. Portable lighting is used on an irregular basis and at differing durations to avoid establishing a routine that could be circumvented by illegal activities. Portable lights can be used in remote areas to adapt to new traffic patterns or based upon counterintelligence, or they can be installed temporarily prior to the installation of permanent light standards. Permanent lighting fixtures are placed on top of wooden, concrete, or metal poles (standards).

1.3.2.10 Boat Ramps and Docks

USBP agents also patrol waterbodies that form the United States' international boundary, such as the Rio Grande river in southern Texas. In order to access remote reaches of some of these waterbodies, boat ramps and docks may be constructed. Increasing the number of access points would enhance the efficacy of the patrols as well as the health and safety of the patrol agents. Boat ramps could be constructed with various materials, including earth, gravel or other aggregates, or concrete, depending upon the location and condition of the site, expected use, and budget constraints, as well as the desires and requirements of the agency with jurisdiction over the affected waterbody. These ramps are not intended for public use and, thus, typically would require less than one acre to be disturbed, including the required parking area. JTF-6 closely coordinates with the pertinent agency(s) in design and placement of boat ramps.

1.3.2.11 Tunnels

JTF-6 has provided support services to various DLEAs in the detection and closure or destruction of tunnels built by smugglers to transport illegal drugs across the border. The methods of destruction of tunnels will be determined on a case-by-case basis depending upon the tunnel's size, locations, proximity to sensitive

resources and geographic position. Methods could include trenching and backfilling, blasting, and/or filling with concrete, bentonite, or other impervious materials.

1.3.2.12 Water Well and Septic Systems

JTF-6 has installed potable water wells and septic treatment systems at remote USBP stations. Wastewater treatment systems have been required to bring the station into compliance with environmental regulations. Water wells have been installed to provide potable supplies at stations where agents have previously been forced to transport water from distances of up to 50 miles. Septic systems and water wells are constructed in strict accordance with Federal, state, and local regulations.

1.3.3 General Support Services

JTF-6 provides a diverse array of general support services, mostly training services, that include marksmanship, data processing, emergency medical procedures, leadership skills, and rapid rappelling techniques. One of the primary types of general support services that JTF-6 provides involves mobile training teams. These teams, consisting of two to five people, would travel to the USBP facility and provide various training sessions. The mobile training team is a more cost efficient method of providing training since it eliminates the need for 30+ agents to travel to a training site. Under this category, JTF-6 also has provided other types of assistance such as intelligence analysis.

Intelligence architecture assessments (IAA) are conducted by JTF-6 analysts to provide the High Intensity Drug Trafficking Areas (HIDTA) an evaluation of JTF-6 intelligence support structure. These analysts provide recommendations to enhance HITDA intelligence development and dissemination. IAAs support the ONDCP mandate for the HIDTAs to share counterdrug intelligence. The deliverable is a document which serves as a road map to produce relevant, accurate, timely, and objective intelligence for HIDTA initiatives. Additionally, the assessment provides guidance relevant to providing event deconfliction, case/subject deconfliction, post seizure analysis, case support, automation connectivity and strategic intelligence. IAAs are conducted on site at each HIDTA and involve interviews, surveys, needs assessment analysis, and data collection. Upon return to JTF-6, analysts conduct more analyses and test their hypothesis, formulate recommendations, and produce the assessment document.

The general support actions comprise about 39 percent of the number of projects performed for DLEAs by JTF-6. The duration of each project is quite varied, as is the number of JTF-6 personnel involved; the typical project, however, would require less than five personnel for less than two weeks. No construction or other ground disturbing activities are associated with this support category. No long term effects to socioeconomic resources (e.g., income, employment, demands on public infrastructure) are incurred due to these missions. Therefore, these types of activities should be categorically excluded from future NEPA documentation as allowed by Army Regulations (AR) 200-2.

1.3.4 Miscellaneous Project Items

Field-oriented projects may require individual encampments or bivouac areas with the supporting facilities, although established military installations or other camping grounds are used when practical. Mess facilities, including soakage pits, are constructed in accordance with the appropriate DoD Technical Manual. Grease traps would be used, if applicable, for large mess units. Field latrines and showers would also be constructed in accordance with DoD manuals and local regulations. All grey water from these facilities would be discharged directly on the ground, in soakage pits, or transported to approved evaporation ponds, as required by state and local laws. Any permits required by the appropriate state environmental agencies for such wastewater discharges would be obtained prior to initiation of the project.

Fuel is usually purchased on an as-needed basis from local, fixed fuel facilities. However, projects that are conducted for longer periods of time and/or in remote locations would require the use of fuel bladders and other POL dispensing equipment. All POL storage and dispensing facilities are constructed and operated in accordance with applicable DoD technical manuals. Special measures such as fuel bladder berms and use of drip pans to contain loss of POL materials would be implemented. Absorbent material is also stored on site to allow rapid clean up of small spills. All spills, regardless of size, would be reported to the unit commander responsible for the incident and to JTF-6. JTF-6 is responsible for reporting to the appropriate Federal and state environmental regulatory agency. All units expected to use or store POL are required to submit a SPCCP to JTF-6 prior to deployment to the project site.

As mentioned previously, the requesting DLEA is responsible for the acquisition of all construction materials. Such items include, but are not limited to, lumber, concrete, fencing, sand and aggregates, paint, electrical wiring, roofing, concrete/cinder blocks, and tin sheeting. Food, POL, and equipment parts may be purchased by JTF-6 from local or home base sources. Maintenance of facilities constructed or upgraded by JTF-6 may be provided by JTF-6 or the requesting DLEA.

1.4 INS/JTF-6 NEPA DOCUMENTATION

INS and JTF-6 routinely complete individual, site-specific NEPA documents such as Environmental Impact Statements (EIS) and Assessments (EA), Categorical Exclusions (CX), and/or Records of Environmental Consideration (REC). However, as the number of projects increased and public resource agencies realized the geographic scope of their work, concerns about cumulative impacts arose. In 1994, INS and JTF-6 prepared a PEIS to address the potential impacts of the overall program. The 1994 PEIS assessed the impacts of JTF-6 support activities from its inception through 1994. This SPEIS will update the 1994 PEIS and compare the projected activities (1994) with the actual types and number of projects completed. Using this information, the anticipated level of activities for a 5 year period (2000 – 2005) will be presented. For all future site-specific JTF-6 projects, JTF-6 will continue to comply with NEPA following DoD Directive 6501 and Army Regulation (AR) 200-2. INS projects will continue to comply with NEPA in accordance with INS regulations as specified in 28 CFR 61.

This SPEIS is intended to satisfy two objectives: (1) identification of the cumulative impacts of past, present and reasonably foreseeable future INS projects supported by JTF-6 and (2) identification of those types of INS projects routinely conducted and supported by JTF-6 that would require an EA or REC to be tiered to this SPEIS or which may fall within a categorical exclusion (CX) classification as defined by DoD Directive 6501 and AR 200-2. A site-specific NEPA document would be prepared for all proposed actions which would not be considered under a CX or REC and for which a determination of significance is required. Reliance upon a CX may be appropriate for those actions which would have limited ground disturbances, be conducted in areas previously disturbed or developed, or otherwise have slight potential to produce adverse environmental or socioeconomic effects. A REC is a brief document which describes the proposed project and its expected impacts (beneficial and adverse) and which is generally tiered to a previous EA, EIS, or other NEPA document. RECs generally provide documented support or justification for a CX.

Examples of types of projects which could be evaluated through a REC include: expansion or reconfiguration of an existing firing range; construction of a helipad at an established airfield or compound; or renovation of a DLEA building. It should be emphasized, however, that surveys for cultural resources, protected species or other environmental liabilities (e.g., hazardous waste sites) may be required to complete the REC. The presence of such resources or conditions may necessitate the REC to be elevated to an EA or EIS. CXs are allowed by NEPA, 28 CFR 61, DoD Directive 6501 and AR 200-2 for those proposed projects that are expected to result in insignificant impacts, if they occur at all. Types of activities that currently fall within this classification include temporary or permanent relocation of small numbers of

military or civilian personnel, purchase of office equipment, weapons training at established firing ranges, data analysis and aerial photointerpretation.

1.5 REPORT ORGANIZATION

This SPEIS is divided into 10 major chapters including this introduction and the description of the proposed action (Chapter 1). Chapter 2 provides a description of the alternatives considered during this evaluation, as well as the alternatives generally considered during the planning of each specific project. This chapter also provides a summary of the impacts (previous and potential) associated with the JTF-6 support to INS, as well as a discussion of the relationship of the current program to other Federal activities. Brief descriptions of the existing natural and human environment are presented in Chapter 3. These descriptions are summaries of detailed discussions presented in a 5-volume document (Environmental Baseline Documents) prepared separately by the INS, JTF-6 and USACE, Fort Worth District. Environmental consequences of each type of activity proposed by INS and JTF-6 on the natural and socioeconomic resources are addressed in Chapter 4. This discussion includes a description of the past and expected cumulative impacts. Mitigation measures that are generally implemented by INS/JTF-6 as part of their standard operating procedures are presented in Chapter 5. The public involvement process is discussed in Chapter 6 and includes comments received during the public comment period and responses to these comments. Chapters 7, 8, 9, and 10 present a list of the persons involved in the preparation of this document, a list of acronyms, references cited in the document, and an index, respectively. Appendix A includes supporting documents of the public involvement program such as copies of the notices of availability published in local newspapers. Transcripts from the scoping meetings were included in the original Draft SPEIS and are not contained herein.

SECTION 2.0
PROPOSED ACTION AND ALTERNATIVES

2.0 PROPOSED ACTION AND ALTERNATIVES

Seven alternatives were considered during the preparation of this SPEIS: (1) Full JTF-6 Support to INS including the ISIS program, (2) Full JTF-6 Support to INS but with no ISIS program, (3) JTF-6 Operational Support Only and Implementation of INS ISIS program (4) JTF-6 Engineering and General Support (No Operational Support) and Implementation of ISIS program (5) JTF-6 Operational Support Only and (6) ISIS Program Only and (7) No Action Alternative. In essence, the latter alternative would require INS to continue its mission with no new infrastructure or facilities. Alternatives 6 and 7, as will be discussed later, were considered but eliminated from further analysis because they did not satisfy the purpose and need of JTF-6 or INS. The remaining alternatives are considered viable alternatives and, thus, are carried forward for analysis. The No Action Alternative would not satisfy the purpose and need of either agency, but is still carried forward for analysis, as required by NEPA and CEQ. The type and magnitude of the impacts associated with each alternative would vary. Each alternative is discussed in more detail in the following paragraphs. Brief descriptions of the types and relative magnitudes of impacts associated with each alternative are also provided. Detailed descriptions of the known and expected impacts associated with the INS/JTF-6 program are presented in Chapter 4 of this SPEIS.

2.1 ALTERNATIVE 1. FULL JTF-6 SUPPORT TO INS, INCLUDING THE ISIS PROGRAM (PREFERRED ALTERNATIVE)

Alternative 1 would allow JTF-6 to provide full (engineering, operational and general) support to INS. Such support is necessary for the INS entities to become more technically and cost efficient in performance of their respective missions. The infrastructure is needed by INS to enhance its mandate to control illegal entries into the U.S. Actions under this alternative would involve major engineering design and construction projects as well as deployment and use of various remote sensing techniques. The combination of these major support facilities and the ISIS provides the most feasible and technically effective strategy for enforcing the counter-drug interdiction laws. This alternative also satisfies the objective of involving the military in the President's National Drug Control Strategy. *This alternative is considered the preferred alternative.*

JTF-6 support services would have unavoidable adverse impacts, primarily to vegetation communities, which have become established within road and fence rights-of-way or other proposed construction sites. Synergistic adverse effects to wildlife populations, due to reductions/alterations of habitats, would also occur. However, some beneficial consequences to wildlife habitat and populations would occur in areas that have been substantially affected by illegal drug smuggling traffic. Other beneficial effects that would result from selection of this alternative include increased detection, deterrence, and apprehension of illegal smuggling activities with concomitant benefits of reduced enforcement costs, losses to personal properties, violent crimes, and entitlement program costs. This alternative would provide a more cost-effective method for INS to obtain the required support while providing training for military units, since the JTF-6 provides labor and equipment at no cost to INS. Such costs are incurred during normal training missions by the participating military unit and, thus, are not additional expenses created by the support project.

The engineering/construction activities that would be expected to occur over the next five years, primarily to support USBP enforcement missions, are presented in Table 2-1. The proposed projects are presented by state. It should be noted that these projects are in the very early planning stages and, thus, locations, timing, and design features can not be identified at this time. In addition, the number of each type of project may have to be altered to adjust to dynamic operational modes of illegal traffickers, as well as budgetary constraints.

Table 2-1
Proposed USBP Projects, by State

Resource	Texas	New Mexico	Arizona	California	Total
			Number of Miles		
Road *	1,267	210	335	139	1,951
Drag road	93			72	165
Primary fence	90		9	81	180
Secondary fence			28	9	37
Vehicle Barriers	90		9	12	111
Subtotal	1,540	210	381	313	2,444
			Number of Items		
Lights	4,325	48	206	98	4,677
Scopes				61	61
Cameras/RVS	165	65	56	99	385
Repeater Site				11	11
Boat Ramps	7				7

*Note – not all roads are parallel or adjacent to the border

As can be seen from Table 2-1, the majority of the engineering activities would involve construction or upgrade of roads and primary fences. The majority of these activities are planned in Texas, as would be expected since it is the largest state within the study area.

Various features to specific projects within this program are always considered during the evaluation of the project's needs and potential impacts. Cost of the project to INS/JTF-6, benefit to the INS entity, potential multi-agency benefits, documented need for the project, scheduling conflicts with reproductive seasons of protected floral and faunal species, ability of the project to provide METL items to the participating unit, and availability of units are all issues considered during the identification and planning of a specific project. Subsequent NEPA documentation prepared specifically for these projects, once they have been identified, would address these types of alternatives and, where appropriate, the impacts associated with each alternative.

Project specific alternatives shall be developed and addressed for each subsequent NEPA document tiered to this SPEIS

Alternatives that should be considered and addressed for each type of action under each support mission are listed in Sections 2.1.1 through 2.1.3, below. It should be noted that this list is not all-inclusive. Evaluation of additional alternatives may be necessary and would be determined on a project-by-project basis.

2.1.1 Operational Support Services

As mentioned previously, most operational support services currently require approval of the SECDEF for each support request prior to initiation of the project. Consequently, even though most of these types of services have not been provided since late 1997, they are allowed and, thus, are still considered a viable mission alternative

Most JTF-6 Operational Support activities require prior approval from the Secretary of Defense

within JTF-6. The operational support services are grouped in two different categories: ground sensors and ground reconnaissance.

2.1.1.1 Ground Sensors and LP/OP

For these types of projects the following site specific considerations would be analyzed:

- placement of ground sensors in non-sensitive sites
- alternate locations of LP/OP sites and access roads, if required
- permanent versus temporary LP/OP sites
- numbers of service personnel and duration of shift during LP/OP operations
- availability of nearby sleeping quarters
- alternate sites and/or re-use of previous TOC
- air radar missions

2.1.1.2 Ground Patrol and Terrain Denial

For these types of projects the following site specific considerations would be analyzed:

- size, schedule and duration of exercise to avoid conflicts with public recreational activities and environmentally sensitive seasons
- availability of nearby sleeping quarters and, if necessary, alternate bivouac sites
- availability of local electrical and water supplies
- aerial reconnaissance versus ground patrol
- alternate sites and/or re-use of previous TOC

2.1.1.3 Aviation Activities

For these types of projects the following site specific considerations would be analyzed:

- manned versus UAV missions
- camera versus FLIR
- area aircraft traffic patterns

2.1.2 Engineering Support Services

Numerous alternatives that should be addressed for project-specific NEPA documents tiered to this SPEIS are common to several of the engineering support activities. Each of these actions should consider the availability and adequacy of existing facilities relative to the need for new construction, construction schedules relative to nesting seasons and recreational opportunities, alternate routes or locations, availability of suitable construction materials on-site and from existing borrow sites, construction design and materials, erosion control measures, presence of protected species and cultural resources, use of previously disturbed areas to minimize vegetation clearing, and availability of nearby sleeping quarters to avoid or reduce bivouac sites. Other alternatives or mitigation measures specific to each service category that should be considered during subsequent NEPA documentation are discussed in the following paragraphs.

Site specific alternatives for all JTF-6 engineering support projects include use of existing facilities, alternative locations, and construction design and schedule

2.1.2.1 Roads, Bridges, Culverts, and Low Water Crossings

For these types of projects the following site specific considerations would be analyzed:

- expected traffic use and type
- maintenance requirements

2.1.2.2 Fences and Barriers

For these types of projects the following site specific considerations would be analyzed:

- aesthetic design
- type of fence (e.g., bollard, sandia, chain link, etc.)
- increased patrol versus fence construction

2.1.2.3 Training Facilities

For these types of projects the following site specific considerations would be analyzed:

- design of lead retention/collection systems for weapons training facilities
- alternate orientation and design of firing ranges/houses
- noise sensitive sites

2.1.2.4 Helipads

For these types of projects the following site specific considerations would be analyzed:

- noise sensitive sites
- rotor/prop wash protection
- containment capabilities for accidental POL spills

2.1.2.5 Checkpoints and Other Building Construction

For these types of projects the following site specific considerations would be analyzed:

- expansion/renovation of temporary structures
- leases

2.1.2.6 Kennels and Stables

For these types of projects the following site specific considerations would be analyzed:

- Proximity to water courses
- Use of existing facilities
- Proximity to noise and odor sensitive receptors (e.g., schools, churches, etc.)

2.1.2.7 Communication Towers

For these types of projects the following site specific considerations would be analyzed:

- Electrical sources (overhead versus underground wiring, solar panels, microwave)
- Co-location with other towers and buildings
- Design of guide wires
- Incorporation of nesting platforms to design

2.1.2.8 Building Demolition

In addition to the general environmental measures described previously, building demolition actions would also consider various disposal methods for demolition debris.

2.1.2.9 Lighting

For these types of projects the following site specific considerations would be analyzed:

- lighting intensity, direction, duration, frequency, type and numbers
- electrical sources (overhead versus underground wiring, solar panels, microwave)
- use of infrared cameras instead of lights
- increased night patrols versus lights

2.1.2.10 Boat Ramps

For these types of projects the following site specific considerations would be analyzed:

- Use of existing boat ramps
- Stabilization of soil at new ramps
- Placement of ramps in disturbed areas

2.1.2.11 Tunnels

For these types of projects the following site specific considerations would be analyzed:

- Proximity to sensitive areas (e.g. neighborhoods, churches)
- Hydraulic connections to aquifers
- Method for destruction
- Disposal of any debris

2.1.2.12 Water Wells and Septic Systems

For these types of projects the following site specific considerations would be analyzed:

- use of bottled water versus water wells
- possible pipeline connection to existing water supply systems
- use of portable/chemical latrines versus treatment systems
- relocation of the USBP base of operations
- possible pipeline connection to existing public treatment system

2.1.3 General Support Services

Alternative evaluations associated with this support group involve administrative choices such as the number of military trainers to be sent to an USBP facility, various computer hardware and data software relative to the USBP's available budget, training locations, or vehicles and aircraft to be used for transportation services. The majority of these support services would have insignificant effects upon the human and natural environment. Therefore, these projects would be categorically excluded from the full NEPA process; RECs would be prepared, if required, to document the justification for exclusion.

2.2 ALTERNATIVE 2. FULL JTF-6 SUPPORT WITHOUT IMPLEMENTATION OF ISIS PROGRAM

Alternative 2 would be similar to Alternative 1, except that the ISIS capabilities (i.e., cameras, lights, ground sensors, and scopes) would be eliminated. To achieve the same level of detection and apprehension of illegal traffic, INS would have to increase their staff to an even higher level. This, in turn, would require additional vehicle traffic. Aerial surveillance activities may also have to be increased. Thus, Alternative 2 would not be as effective as the preferred alternative. This alternative would allow JTF-6 to continue to provide operational, general and engineering support to INS. Direct adverse environmental impacts would be slightly reduced under Alternative 2 by elimination of the construction activities associated with installing the ISIS infrastructure. Socioeconomic benefits would be reduced under this alternative in regards to a less effective strategy to control illegal entries.

2.3 ALTERNATIVE 3. JTF-6 OPERATIONAL SUPPORT ONLY AND IMPLEMENTATION OF THE ISIS PROGRAM

This alternative would require that JTF-6 provide only operational support (i.e., no engineering or general support) to INS. INS would expand its remote sensing capabilities with the implementation of the ISIS program, although construction support for the ISIS infrastructure (towers, etc.) would have to be provided by other agencies or private contractors. INS and JTF-6 would still be required to consider the alternative measures described in subsections 2.1.1 and 2.1.2.6, above, for any JTF-6 operational support activities and the ISIS facilities that are installed. Potential direct adverse environmental impacts would be greatly reduced under Alternative 3 since the majority of adverse environmental impacts are associated with the JTF-6 engineering support/construction activities. Some INS construction activities would still be required and would not be as cost effective as using volunteer units supported by JTF-6. For example, access roads to some tower sites may be needed since these systems are generally placed in remote areas at higher elevations. This alternative would greatly reduce the opportunities to provide realistic military training and the benefits derived from such training. Many socioeconomic benefits may not be realized under this alternative either, since the effectiveness of the INS in apprehending illegal drug traffickers would be greatly reduced. This scenario would require the INS to become reactive to illegal entrants rather than its current proactive strategies. USBP agents would continue to use existing roads until they become impassable. Synergistic effects of this situation would be an increase in soil erosion, but less effective enforcement actions.

2.4 ALTERNATIVE 4. JTF-6 ENGINEERING AND GENERAL SUPPORT ONLY AND IMPLEMENTATION OF THE ISIS PROGRAM

Implementation of Alternative 4 would allow JTF-6 to provide engineering and general support to INS, but no operational support. The ISIS program would also be implemented under this scenario. Direct impacts under this alternative are very similar to those that would be incurred upon implementation of the Preferred Alternative (Alternative 1), although operational support activities can produce environmental effects, as briefly described in Section 1.4.1 and later in Section 4. The USBP's effectiveness in detecting and deterring illegal drug trafficking would be reduced by the elimination of JTF-6 operational support, particularly aerial reconnaissance missions. Ground patrol and terrain denial missions are also a proven deterrence method for site specific areas that are expected to experience temporary increases in illegal entries. Such missions would often obviate the need for more permanent barriers or other infrastructure.

2.5 ALTERNATIVE 5. NO ACTION

The No Action Alternative would allow the continuation of the INS activities, as they currently exist (i.e., no *additional* infrastructure, special training, or ISIS capabilities). Selection of the No Action alternative would not satisfy the purpose and need for an enhancement of the efficacy of INS' enforcement agencies involved in drug smuggling activities. It also does not satisfy the intent of the U.S. Congress as specified in the National Defense Authorization Act nor the National Drug Control Strategy, which includes as one of its five tenets military assistance in the interdiction and control of illegal drugs. Further, the No Action Alternative does not satisfy the Congressional mandate to gain and maintain control of the border. While selection of this alternative would eliminate the potential for adverse environmental impacts, it should be recognized that INS and JTF-6 actions have resulted in an increase in apprehensions and convictions of drug traffickers, increased knowledge of cultural resources and populations of threatened and endangered species, and habitat improvement for endangered species. Conversely, implementation of the No Action Alternative would result in the continued and increasing levels of illegal entry of contraband, persons, and vehicles into the U.S. Violent crimes associated with these illegal activities would also increase.

2.6 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER CONSIDERATION

2.6.1 JTF-6 Operational Support Only

This alternative would allow JTF-6 to provide only operational support (i.e., no engineering or general support) to INS and would eliminate additional ISIS program components. Under this scenario deterrence would be provided by the presence of USBP agents, existing barriers, fences and roads, and certain JTF-6 operational support missions (e.g., ground patrol or terrain denial missions). Detection would be limited to the existing ISIS facilities, JTF-6 aerial reconnaissance missions and other intelligence actions, and visual observations made by the USBP agents. The USBP ability to apprehend illegal drug traffickers, however, would be significantly reduced since the roads and other infrastructure would eventually degrade and become either impassable or unsafe. More frequently, apprehensions would have to be made along paved highways and streets creating additional safety issues for the illegal entrants, the USBP agents, and the general public. This scenario would also increase the chances of illegal drug traffickers to successfully enter the United States. Under this alternative the ability to apprehend the illegal entrants would be so severely reduced, new deterrence barriers would not be built, existing infrastructure would not be repaired or

upgraded, and very limited military training opportunities would be provide; therefore, this alternative was eliminated from further consideration.

2.6.2 Technology Only

This alternative would eliminate all JTF-6 support to INS and rely solely on the ISIS program. No deterrence or detection benefits would be derived from the operational support provided by JTF-6. Weapons, detection, and intelligence gathering training to USBP agents would be reduced. No additional infrastructure (e.g., roads, bridges, fences, training facilities, checkpoints, etc.) would be constructed by JTF-6 and no repair or upgrade to existing infrastructure would be provided. The ISIS program would provide detection capabilities, but the USBP's ability to deter and apprehend illegal drug traffickers would be significantly reduced. This alternative also would not provide training opportunities for JTF-6 units and would not satisfy the mandates of the National Drug Control Strategy nor IIRAIRA. Therefore, this alternative was eliminated from further consideration.

2.7 SUMMARY

Table 2-2 presents a summary of the impacts, by alternative, expected to occur over the 5-year period. Although Alternative 3 would have the least direct adverse environmental impacts, it would not satisfy the mission of INS as mandated by the U.S. Congress. It is, therefore, not the preferred alternative.

2.8 RELATIONSHIP TO OTHER FEDERAL PROJECTS

Numerous Federal, state and local agencies have or would have planning projects that could affect, or be affected, by the INS and JTF-6 programs. The vast geographic area encompassed by this program combined with the difficulty in defining specific projects make it virtually impossible to evaluate the specific relationship of the JTF-6 program with other governmental plans. Coordination would continue to be made with appropriate agencies when site-specific projects are identified to ensure that other Federal programs/projects are not adversely affected or that unnecessary cumulative effects are avoided.

2.8.1 International Boundary and Water Commission

The International Boundary and Water Commission, United States and Mexico (IBWC) is a bilateral organization between the respective State Departments of the U.S. and Mexico. The IBWC was permanently established by the Convention of 1889 as the International Boundary commission (IBC), and was given its present name by the Treaty of 1944. The IBWC is composed of a United States Section and a Mexican Section, headquartered in El Paso, Texas and Ciudad Juarez, Chihuahua, respectively. An Engineer Commissioner appointed by their respective president heads each Section. The function of the IBWC is to oversee the implementation of the numerous boundary and water treaties and related agreements between the U.S. and Mexico. Along the land boundary between El Paso, Texas and San Diego, California, the IBWC is charged with ensuring the permanence of the boundary monumentation which includes periodically inspecting, repairing/replacing, and resurveying the monuments. International agreements specify that access to, and line-of-sight between all monuments will not be obstructed. Satisfying this agreement usually required that border fences and other constructed works be constructed along an alignment which is offset a distance form the international boundary, and that additional offset be provided, and access gates be installed, in the vicinity of the boundary monuments. Limited technical investigative authority is given to the USIBWC through U.S. Statutes; under this authority the USIBWC asks that U.S.

development near the international land boundary not alter existing surface drainage patterns and characteristics.

The river boundary between the U.S. and Mexico follows the centerline of the channels of the Rio Grande between El Paso, Texas, and the Gulf of Mexico, and along the Colorado River in the vicinity of Yuma, Arizona. Along these portions of the international boundary, the IBWC is charged through the numerous treaties and agreements with determining national ownership of waters flowing in the rivers, and preventing unnatural movement of the river channel (and thus the border) through gradual erosion of the channel banks, or sudden avulsion of the entire channel. Water ownership is determined using a series of flow gages strategically located along the river reaches. The IBWC attempts to prevent unnatural erosion or avulsion of the river channel by jointly reviewing all plans for construction within the floodplains of the rivers, and prohibiting construction which is technically shown to affect river flows.

The USIBWC also operates and maintains the U.S. portions of a number of international flood control projects along the Rio Grande. These projects contain infrastructure such as levees, diversion dams, control weirs and drop structures. Land upon which this infrastructure is located, as well as the bed and banks of the river and (for some projects) the floodplain, are owned or otherwise controlled by the USIBWC. Two international multipurpose dams are located on the Rio Grande. These dams are the Amistad Dam near Del Rio, Texas and the Falcon Dam near Zapata, Texas. The U.S. portions of these dams and associated upstream reservoirs are owned, operated, and maintained by the USIBWC. Finally, the USIBWC is involved in several international waste water treatment plants in several border cities. Proposed activities in the U.S. which have the potential to affect operation and/or maintenance of the flood control projects, the multipurpose storage dams and associated reservoirs, or the wastewater treatment plants must be approved, and in some cases, licensed by the USIBWC.

Growing emphasis on protection of the environment and endangered species in all government activities has prompted the USIBWC to reach an agreement with the U.S. Fish and Wildlife Service (USFWS) regarding a vegetated wildlife travel corridor along the Rio Grande in the Lower Rio Grande Valley of Texas. This agreement ensures the establishment of a wildlife travel corridor of native vegetation in prescribed areas along the Rio Grande. Pursuant to Section 7 of the Endangered Species Act, the USFWS issued a biological opinion in May 1993 on the impacts of the USIBWC's maintenance of the international Lower Rio Grande Flood Control Project on federally listed endangered species. Although the agreement is specifically for USIBWC's maintenance area in the generally vicinity of Brownsville, Texas and Matamoros, Tamaulipas, the USIBWC is committed to coordinate with the USFWS in all areas along the Rio Grande and Colorado River to assure the protection of native habitat that can be used as a wildlife corridor. Any activity proposed that could potentially affect native habitat along the rivers should be coordinated with the USFWS during initial planning stages to prevent adverse impacts to the corridor and endangered species.

2.8.2 Border XXI

The Border XXI Program is an innovative binational program spearheaded in the U.S. by the U.S. Environmental Protection Agency (USEPA). The program attempts to bring together the diverse U.S. and Mexican Federal entities responsible for the shared border environment to work cooperatively toward sustainable development while protecting human health and the environment. Integral to this program is the proper management of natural resources in both countries.

Table 2-2 Summary Matrix of Impacts Associated with Program Alternatives

	ALTERNATIVE 1 Full JTF-6 Support & ISIS Program	ALTERNATIVE 2 Full JTF-6 Without ISIS Program	ALTERNATIVE 3 JTF-6 Operational Support & ISIS Program	ALTERNATIVE 4 JTF-6 Engineering and General Support & ISIS Program	ALTERNATIVE 5 No Action
SOILS	Soil disturbance for engineering projects with concomitant erosion potential without adequate mitigation; up to 6,900 acres disturbed; extant erosion problems halted or reduced in some areas.	Similar effects as Alternative 1, but on less acreage (about 6,200 acres).	Additional soil disturbances on less than 100 acres; extant erosion problems would continue.	Similar effects to soils as Alternative 1. Slightly less temporary effects to soils by eliminating bivouac sites, etc. associated with operational support.	INS and/or USBP would eventually have to upgrade or construct roads, ranges, etc. with similar or worse consequences to soils.
WATER SUPPLY AND QUALITY	Insignificant effect to surface water quality during construction activities; indirect improvements by reduction of extant erosion problems; insignificant amounts of potable water supply consumed by construction personnel; no effect on groundwater supplies expected.	Same effects as Alternative 1	No additional temporary effects to surface water bodies; surface water would continue to receive erosional contaminants without erosion control implemented by INS/JTF-6; no significant effects on ground water supplies expected.	Elimination of operational support activities would slightly reduce the amount of water consumed. Other JTF-6 engineering support actions would have similar effects as described for Alternative 1.	Surface waterbodies would continue to receive eroded sediments without erosion measures implemented with INS/JTF-6 projects. Less demand on local supplies due to lack of large operational or engineering support operations.
AIR QUALITY	Slight, temporary increases in pollutants during construction activities and helicopter flights; actions would not result in exceedance of state/EPA standards or otherwise produce a nonconformance declaration; up to 500,000 tons PM_{10} per year over entire project area produced.	Same effects as Alternative 1	No effect on air quality.	Similar, but slightly less effects as Alternative 1.	No direct effect on air quality; lack of road improvements could increase fugitive dust levels.

Table 2-2 Summary Matrix of Impacts Associated with Program Alternatives

	ALTERNATIVE 1 Full JTF-6 Support & ISIS Program	ALTERNATIVE 2 Full JTF-6 Without ISIS Program	ALTERNATIVE 3 JTF-6 Operational Support & ISIS Program	ALTERNATIVE 4 JTF-6 Engineering and General Support & ISIS Program	ALTERNATIVE 5 No Action
NOISE	Temporary increases in noise levels during construction activities, weapons training, and aircraft flights; ambient noise levels would return immediately upon cessation of such actions.	Same effects as Alternative 1	Temporary noise increases during installation of ISIS and JTF-6 operational/ construction missions for other DLEAs; ambient noise levels would return immediately upon cessation of recurring activities.	Similar increases in noise levels as Alternative 1 except that weapons training programs and aerial reconnaissance missions would not occur	Lack of new firing ranges would require more frequent use of extant ranges and thus increase noise at these facilities. Ambient noise levels would remain the same otherwise.
VEGETATION COMMUNITIES	About 3,800 acres disturbed to date due to construction activities; maximum of 6,900 acres expected to be altered during the next five years for a total of 10,700 over a 15-year period; most alterations would be incurred to Chihuahuan desert scrub; some roads relocated from riparian areas to desert scrub; less than 5 acres of wetlands affected since 1994.	Similar effects as Alternative 1 except about 90 acres less would be affected.	Additional alteration of vegetation communities of less than 100 acres would be expected.; uncontrolled access and use of lands by drug traffickers would continue to adversely affect wildlife habitat.	Similar effects would occur as Alternative 1. Slightly less acreage would be affected by elimination of operational support missions, though these effects are typically temporary.	Vegetation would continue to reclaim roads used by USBP for reconnaissance and/or enforcement action. Uncontrolled access and use of lands by drug traffickers would continue to adversely affect vegetation communities.
WILDLIFE	Individual specimens temporarily affected by JTF-6 support activities; some individuals may be crushed or trampled by equipment; reduction in habitat capable of supporting up to 210,000 lizards, 6,000 birds, and 36,000 small mammals.	Similar effects as Alternative 1 but of slightly less magnitude due to less habitat altered.	Similar effects as Alternative 1 but significantly reduced in magnitude; indirect destruction of vegetation communities caused by uncontrolled access or use would have concomitant results to wildlife.	Similar effects as Alternative 1. No effects to wildlife from operational support activities such as terrain denial and aerial reconnaissance missions	Indirect destruction of vegetation communities caused by uncontrolled access, use or wildfires would have concomitant results to wildlife.

Table 2-2 Summary Matrix of Impacts Associated with Program Alternatives

	ALTERNATIVE 1 Full JTF-6 Support & ISIS Program	ALTERNATIVE 2 Full JTF-6 Without ISIS Program	ALTERNATIVE 3 JTF-6 Operational Support & ISIS Program	ALTERNATIVE 4 JTF-6 Engineering and General Support & ISIS Program	ALTERNATIVE 5 No Action
FISHERIES	Little or no significant effects on fish population due to nature of INS and JTF-6 actions and limited permanent waterbodies in project areas; temporary disturbances during boat ramp construction, but probable long-term benefits due to structure provided.	Same effects as Alternative 1	No direct effects to fish populations; indirect adverse effects could occur with extant erosion and sedimentation allowed to continue near waterbodies and floodplains.	Same effects as Alternative 1	Same as Alternative 3.
THREATENED AND ENDANGERED SPECIES	One plant species affected in last five years and restored to higher population levels through restoration activities; enhanced monitoring mitigation measures developed for future projects; increased knowledge of T&E species populations through field surveys and monitoring programs; enhanced habitat for California gnatcatcher; protection of California least tern nesting habitat on California coast.	Same effects as Alternative 1	Negligible potential effects (adverse or beneficial) on T&E species. ISIS facilities can be located to avoid T&E species habitat. Operational support services would have slight potential to affect T&E species due to trampling during ground patrols or terrain denials.	Slightly less effects as described for Alternative 1, due to the elimination of operational support services. Terrain denial and ground patrol actions, which have minimal potential to affect T&E species, would not be performed under this alternative.	Continued loss caused by illegal activities of sensitive habitats which support T&E species; continued scrub encroachment, no JTF-6 funded or sponsored expanded knowledge of T&E species habitats and locations.
SOCIO-ECONOMICS	Significant socioeconomic benefits from reductions in illegal drug smuggling and, secondarily, illegal immigration. Positive, but mostly insignificant, local economic benefits from local JTF-6 expenditures. No disproportionate adverse effects to low income or minority schools and populations	Similar effects as Alternative 1, but effectiveness of USBP would be reduced with concomitant increases in illegal trafficking.	Similar socioeconomic benefits, though significantly reduced, as Alternative 1, from reductions in illegal drug smuggling and, secondarily, illegal immigration; negligible direct economic benefits from local construction expenditures.	Beneficial effects similar to that described for Alternative 1. Negligible reductions in effects as a result of eliminating operational support activities.	Significant socioeconomic costs from continued illegal drug smuggling and, secondarily, illegal immigration.

Table 2-2 Summary Matrix of Impacts Associated with Program Alternatives

	ALTERNATIVE 1 Full JTF-6 Support & ISIS Program	ALTERNATIVE 2 Full JTF-6 Without ISIS Program	ALTERNATIVE 3 JTF-6 Operational Support & ISIS Program	ALTERNATIVE 4 JTF-6 Engineering and General Support & ISIS Program	ALTERNATIVE 5 No Action
CULTURAL RESOURCES	Limited site specific impacts have occurred; increased traffic and future maintenance could cause cumulative impacts without mitigation; INS and JTF-6 actions have increased knowledge of cultural resources in the region; over 100 new sites that are potentially eligible for NRHP listing recorded in past 5 years.	Similar effects as Alternative 1, but with slightly less potential to affect cultural resources due to less (90 acres) potential ground disturbances.	Negligible, if any, adverse impacts to sites; very limited expansion of regional knowledge. Uncontrolled access or use of lands by illegal drug traffickers may adversely affect cultural resources.	Similar adverse effects as Alternative 1. Beneficial effects of discovering new cultural resources sites by surveying bivouac sites, LP/OPs, etc. would be slightly reduced.	Similar effects as Alternative 3, but with no JTF-6 sponsored or funded expanded knowledge of regional history or pre-history.
VISUAL RESOURCES	Some adverse effects associated with engineering operations, particularly straight line border roads and fences. Impacts can be ameliorated through environmental design features. Limited benefits from erosion control and building demolition depending upon severity of existing conditions. Placement of ISIS towers may detract from some views.	Same effects as Alternative 1	No significant adverse impact to visual resources; placement of ISIS towers may detract from some views.	Similar, but slightly less effects as Alternative 1. Large operational support actions such as terrain denial, etc. would be eliminated; the magnitude of this effect would be depend on size, season, and location of the mission.	Litter/trash along border would remain visible. Continued destruction of natural communities due to illegal foot and vehicle traffic.

Despite numerous previous bilateral agreements and efforts, unsustainable practices in the border region have resulted in degradation of environmental conditions. Industrialization has brought important economic benefits to the border region, but often resulted in accelerated population growth and consumption that surpassed the capacity of the natural resources. Basic infrastructure, particularly with regard to water resources, were also jeopardized. These conditions present a threat to biodiversity and air and water quality, and pose health risks to border residents.

Border XXI defines the five-year objectives for the border environment and describes mechanisms for fulfilling those objectives. The success of Border XXI is contingent upon broad-based, binational participation by Federal, state and local governments, Native American tribes, international institutions, academia, non-governmental organizations, the private sector, and border citizens and communities.

The key Federal agencies involved in developing and implementing Border XXI are:

- Environmental Protection: the U.S. Environmental Protection Agency (USEPA) and Mexico's Secretariat for Environment, Natural Resources and Fisheries (SEMARNAP) and Secretariat for Social Development (SEDESOL).

- Natural Resources: the U.S. Department of the Interior (USDI), the U.S. Department of Agriculture (USDA), and SEMARNAP.

- Border Water Resources: U.S. and Mexican Sections of the International Boundary and Water Commission (IBWC), USDI, USEPA, and SEMARNAP.

- Environmental Health: the U.S. Department of Health and Human Services (HHS) and Mexico's Secretariat of Health (SSA).

2.8.3 U.S. Department of the Interior

The U.S. Department of the Interior, through three of its primary agencies, the USFWS, National Park Service (NPS), and Bureau of Land Management (BLM), has regulatory jurisdiction or management responsibilities over vast amounts of Federal lands throughout the southwest. The BLM, in particular, has management responsibilities for millions of acres in New Mexico, Arizona and California. As steward of these lands, the BLM prepares and implements integrated management plans for a variety of natural resources including grazing lands, mineral deposits, water supplies, recreational opportunities, and unique or environmentally sensitive areas and/or species populations. These plans and their associated NEPA documents, if applicable, are reviewed during the planning stages of all INS and JTF-6 actions to ensure that no conflicts would be incurred. BLM personnel are also consulted whenever INS and JTF-6 activities are planned near or within lands managed by BLM.

The USFWS has management responsibility for lands within its refuge and wilderness systems as well as advisement responsibilities for actions, funded solely or partially by the Federal government, which may affect listed threatened or endangered species. INS and JTF-6 routinely consult with the USFWS during the planning stages to determine the potential presence and/or effects of the proposed project on protected and candidate species. In cases where USFWS lands may be involved, INS and JTF-6 will closely coordinate with the USFWS to ensure that the project will not conflict with USFWS management plans. The USFWS currently is planning to expand its properties located within the Lower Rio Grande Valley and within San Diego County. Future projects would need to be coordinated to ensure that conflicts with these plans do not arise. Field surveys performed for INS and JTF-6 actions enhance the database for protected species.

The NPS manages several National Parks along the U.S./Mexico border. Portions of some INS and JTF-6 actions have been located within a few of these parks, which have been at the joint request of the NPS and

USBP. Consequently, the NPS, INS and JTF-6 coordinate closely in order to ensure that the proposed operations will complement NPS plans for development or restrictions thereof. The NPS presently has no known plans to expand its landholdings along the southwestern border.

2.8.4 Department of Defense

The DoD manages several installations along the border including, but not limited to, Fort Bliss, White Sands Missile Range, Barry M. Goldwater Air Force Range, Fort Huachuca, Yuma Marine Corps Air Station, Laughlin Air Force Base, Yuma Proving Ground, Davis-Monthan Air Force Base, and Camp Pendleton Marine Corps Base. These installations manage vast amounts of lands within the 50-mile wide study corridor. Since JTF-6 is a DoD agency, close coordination with these installations and their respective commands is routinely performed for any projects planned by JTF-6. Potential conflicts are resolved immediately and prior to initiation of any activities that may affect lands or operations on these installations.

2.8.5 Native American Nations

Several Native American nations are also located along the U.S./Mexico border. Because of their sovereign nation status, the individual council overseeing each reservation is consulted on each proposed INS and JTF-6 project that may affect or traverse these lands. Prior approval is required from the respective council before project personnel are allowed to begin operations. The Native American nations that occur within the study area are listed in Table 2-3.

2.8.6 Department of Agriculture

At the request of INS, JTF-6 has also performed operations within National Forest lands that fall within the jurisdiction of the U.S. Department of Agriculture, U.S. Forest Service (USFS). Many of the road repair projects completed by JTF-6 within National Forests have been accomplished at the joint request of the USFS and USBP. INS and JTF-6 closely coordinate with the USFS to ensure that there are no conflicts with USFS short- or long-term plans for timber harvest, endangered species protection, or recreational opportunities.

2.8.7 Federal and State Regulations and Permitting Programs

Other Federal and state agencies, as applicable, are consulted during the early planning process to ensure that all conflicts with development, operational, or managerial plans are avoided or are resolved prior to initiation of the proposed project. The relationship of the proposed program with compliance requirements of applicable Federal regulations is presented in Table 2-4. Individual states have permitting authorities for various actions affecting air, water, and natural resources, or for the production of hazardous wastes. A list of the permits that could be required by an INS or JTF-6 action is presented in Table 2-5. INS, JTF-6, or the requesting DLEA would have to determine the applicability of these permit requirements for each future project and ensure their compliance.

Table 2-3 – Native American Nations Within the SPEIS Study Area

Reservation Name	County(s)	State
Kickapoo	Maverick	TX
Yselta Del Sur	El Paso	TX
Mescalero Apache	Otero	NM
Tohono O'Odham	Pima, Pinal, Maricopa	AZ
San Carlos	Pinal	AZ
Gila River	Pima, Maricopa	AZ
Fort McDowell	Maricopa	AZ
Salt River	Maricopa	AZ
AkChin	Pinal	AZ
Cocopah	Yuma	AZ
Fort Yuma	Yuma	AZ
Colorado River	Yuma	AZ
Chemehuevi	La Paz	AZ
Fort Mojave	La Paz	AZ
Hualapai	La Paz	AZ
Kaibab	La Paz	AZ
Fort Yuma	Imperial	CA
Torres-Martinez	Imperial, San Diego	CA
Puma & Yuima	San Diego	CA
La Jolla	San Diego	CA
Los Coyotes	San Diego	CA
Inaja and Cosmit	San Diego	CA
Capitan Grande	San Diego	CA
Cuyapaipe	San Diego	CA
Manzanita	San Diego	CA
Campo	San Diego	CA
La Posta	San Diego	CA
Jamul	San Diego	CA
Sycuan	San Diego	CA
Viejas	San Diego	CA
Barona Ranch	San Diego	CA
Mesa Grande	San Diego	CA
Santa Ysabel	San Diego	CA
San Pasqual	San Diego	CA
Rincon	San Diego	CA
Pala	San Diego	CA
Pechanga	San Diego	CA

Table 2-4 - Relationship of the Proposed Action to Federal Environmental Requirements and Protection Statutes

Item	Compliance
Federal Statutes	
Archeological and Historic Preservation Act	Partial Compliance[1]
American Indian Religious Freedom Act	Partial Compliance[1]
Archeological Resources Protection Act	Partial Compliance[1]
Native American Graves Protection and Repatriation Act	Partial Compliance [1]
Land and Water Conservation Fund Act, as amended	Not Applicable
Marine Protection, Research and Sanctuaries Act	Partial Compliance[2]
National Historic Preservation Act, as amended	Partial Compliance[1]
National Environmental Policy Act, as amended	Partial Compliance[3]
Rivers and Harbors Act	Partial Compliance[4]
Clean Air Act	Full Compliance
Clean Water Act	Partial Compliance[4]
Coastal Zone Management Act	Partial Compliance[5]
Coastal Barrier Improvements Act	Partial Compliance[5]
Watershed Protection and Flood Prevention Act	Full Compliance
CERCLA	Full Compliance
Endangered Species Act	Partial Compliance[6]
Migratory Bird Treaty Act	Partial Compliance[6]
Eagle Protection Act	Partial Compliance[6]
Wild and Scenic Rivers Act, as amended	Partial Compliance[7]
Farmland Protection Policy Act	Partial Compliance[8]
Federal Land Policy and Management Act	Not Applicable
The Wilderness Act, 16 U.S.C., 1131-1136	
Arizona Desert Wilderness Act	
National Wildlife Refuge System Administration Act, 16 U.S.C., 668dd-668ee	
National Wildlife Refuge System Improvement Act of 1997, P.L. 105-57	
Executive Orders, Memorandums, etc.	
Floodplain Management (EO 11988)	Full Compliance[9]
Protection of Wetlands (EO 11990)	Full Compliance[9]
Environmental Effects Abroad of Major Federal Actions (EO 12114)	Not Applicable
Protection and Enhancement of the Cultural Environment (EO 1593)	Full Compliance
Environmental Justice (EO 12898)	Full Compliance

[1] Full compliance would be achieved when appropriate review and coordination is completed and coordinated with the SHPO, tribal entities, and/or BIA, if required for individual projects.

[2] Full compliance would be achieved when an INS/JTF-6 project is performed in marine ecosystems and the project is coordinated through the USFWS, USACE, and National Marine Fisheries Service.

[3] Full compliance would be achieved when the final SPEIS is filed with the U.S. Environmental Protection Agency.

[4] Full compliance would be achieved upon issuance of permits and Water Quality Certification from appropriate Corps Districts and state agencies, if required, for individual projects.

[5] Full compliance would be achieved when consistency determination is made in coordination with states of Texas and California, for future site-specific projects.

[6] Full compliance would be achieved when coordination with the U.S. Fish and Wildlife Service and state natural resources agencies is completed for each specific project.

[7] Full compliance would be achieved when and if a project is planned near the reach of the Rio Grande that is protected by this Act and the project is coordinated through the USDI.

[8] Full compliance would be achieved when the Prime Farmland impact assessment is coordinated with the NRCS for individual projects.

[9] No activity will be undertaken without the requisite analysis and findings required by EO 11988 and 11990 prior to imitation of the activity

Table 2-5. State Permits Potentially Required for Future INS and JTF-6 Projects

State	Media/resource affected	Permit	Agency
Texas	Air, RCRA, solid waste, water quality and rights	Consolidated Permit (individual permits may also be applied for and granted)	Texas Natural Resources Conservation Commission (TNRCC)
	Coastal Areas	Coastal Use Permit	Texas Coastal Commission
New Mexico	Air	Relocation for Portable Small Compressor Engines General Permit Package	New Mexico Environment Department (NMED) NMED
	Water/wetlands	401 Water Quality Certification	New Mexico Surface Water Board (SWB)
		Notice of Intent to Discharge NPDES Stormwater Permit	SWB and EPA SWB and EPA
Arizona	Air	Air Quality Control Permit	Arizona Department of Environmental Quality (ADEQ)
	Water/wetlands	401 Water Quality Certification NPDES Stormwater Permit	ADEQ ADEQ
	Groundwater	Individual Aquifer Protection Permit	ADEQ
	Native Plants	Arizona Native Plant Salvage Permit	Arizona Department of Agriculture
California	Air	Statewide Portable Equipment	California Air Resources Board (CARB)
		Registration permit to Operate	County Air Pollution Control Districts
	Water	Construction Activities Stormwater 401 Water Quality Certification Permit	California State Water Quality Control Board (SWRCB)
	Coastal Areas	Coastal Use Permit	California Coastal Commission

SECTION 3.0
AFFECTED ENVIRONMENT

3.0 AFFECTED ENVIRONMENT

As mentioned previously, a large number of INS and JTF-6 projects are conducted within the four southwestern states, Texas, New Mexico, Arizona and California, mostly within a 50-mile corridor along the U.S./Mexico border and Texas Gulf coast. Because of the uncertainty of the locations of potential projects outside this corridor, the particular project area for this SPEIS (2,800-mile long corridor) extends from Port Arthur, Texas to San Diego, California.

The baseline, or existing, conditions of the human and natural environment along this corridor have been thoroughly described in a five-volume set entitled "Environmental Baseline: Texas Gulf Coast (Volume 1), Texas Land Border (Volume 2), New Mexico Land Border (Volume 3), Arizona Land Border (Volume 4), and California Land Border (Volume 5)", as indicated in Figure 3-1. These documents were updated and, in March 2000, distributed for review to regional libraries, USBP Sector Headquarters and other agencies throughout the study area as well as the Fort Worth District Corps of Engineers. The addresses where these documents are located are presented in Appendix B. These documents are incorporated herein by reference, as allowed by 40 CFR 1508.02. The baseline documents can also be viewed or down loaded at the following Internet website: www.swf.usace.army.mil/ins/peis/default.htm

The data presented in these documents are on a county-level basis and by physiographic province. The resources that have the greatest potential for being affected by INS and JTF-6 activities are briefly discussed in the following paragraphs. These discussions are paraphrases of the detailed descriptions provided in the Environmental Baseline documents. They are presented herein merely to acquaint the reader with the project region; if additional information is necessary, the reader should refer to the Environmental Baseline documents. For clarity, each volume of the Environmental Baseline technical support documents is summarized separately.

3.1 TEXAS GULF COAST (VOLUME 1)

3.1.1. Geological Resources

The project study area along the Texas Gulf Coast occurs entirely within the Gulf Coastal Plains Physiographic Province. Landforms in the area are subtle and reflect different rock types with the sandstones forming gentle hills and the shales forming valleys.

Geology of the study area is characterized by broad sub-parallel bands of Quaternary sedimentary rocks and unconsolidated deposits. Formations include Montgomery, Bentley, Beaumont, and Deweyville. The predominant consolidated rock types are mixed shales and sandstones derived from alluvial deposition.

3.1.2. Soils

Sixteen soil associations occur within the limits of the study area. The soils of the study area are level to undulating and are characterized as having a clayey to loamy texture. An area of sandy soils occurs from Baffin Bay to Brownsville and on Padre Island. The majority of the soil associations present have a high clay content and, consequently, exhibit a slight to moderate level of erodability and a low to high potential to shrink and swell. Therefore, depending on location, limitations to construction could exist due to the presence of clays within the soil profile. This information remains unchanged from the previous document prepared in 1994.

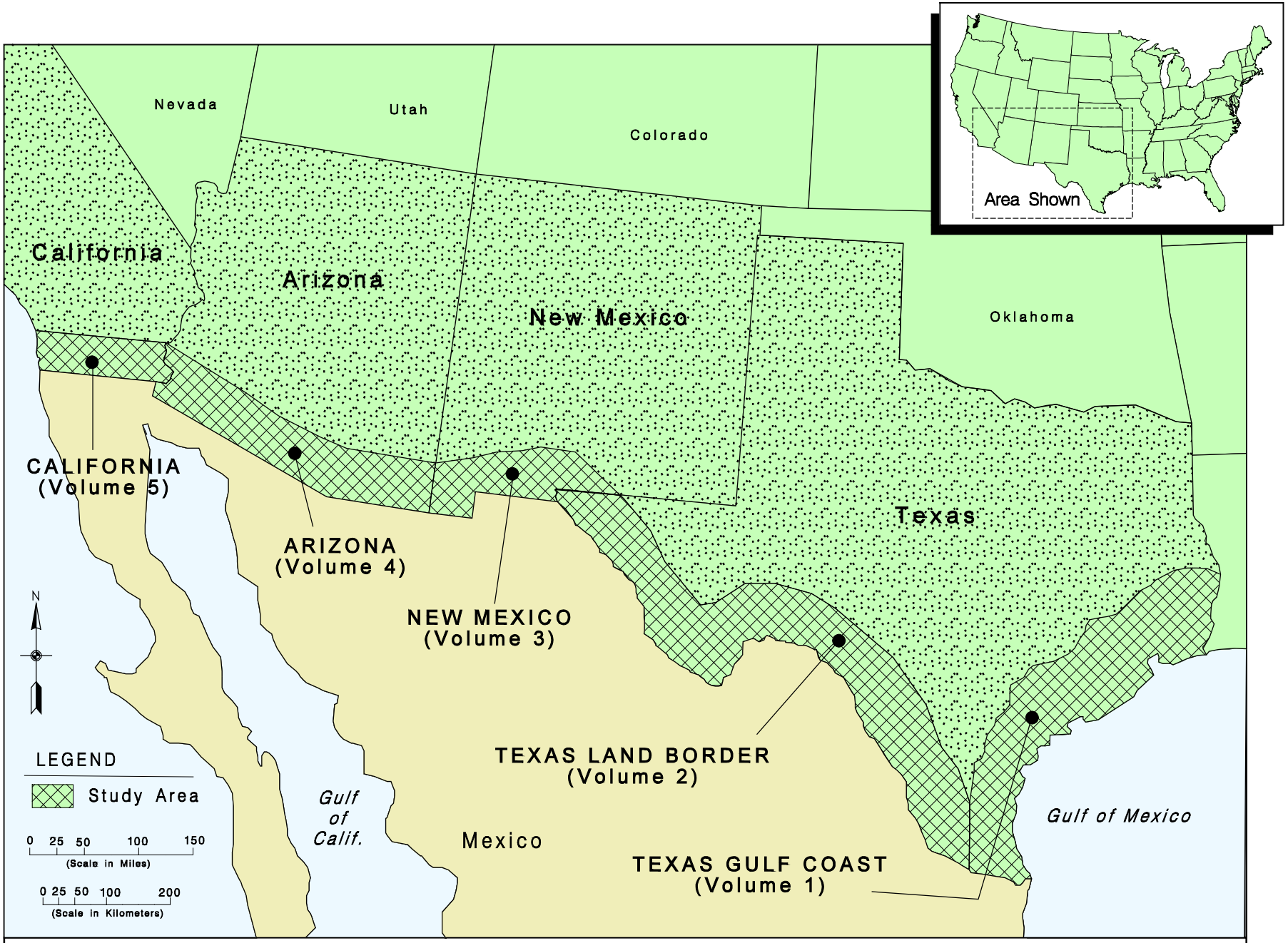


Figure 3-1. Baseline Study Area - Texas Gulf Coast and the U. S. Mexico International Land Border

3.1.3 Air Quality

The 20 counties of the Gulf Coastal Plains Province along the Texas Gulf Coast segment of the study area fall into four Air Quality Control Regions (AQCR) established by the U.S. Environmental Protection Agency (USEPA) for air quality planning purposes. Two of these four areas are in non-attainment of National Ambient Air Quality Standards (NAAQS) (mainly ozone): the Metropolitan Houston-Galveston Intrastate AQCR and the Southern Louisiana-Southeast Texas Interstate AQCR. The counties of the Texas Gulf Coast segment of the study area can generally be characterized as moderately to heavily populated and highly industrialized. Man-made sources of air contaminants in this area include industrial emissions, mobile (vehicular) emissions, and area source emissions (e.g., emissions from numerous residences and small commercial establishments in an urban setting). Meteorological conditions increase air quality problems in some of the more inland portions of the study area by creating numerous periods of atmospheric stagnation and subsequent increases in the concentrations of air pollutants. The highly urbanized and industrialized Houston (Harris County) area experiences numerous episodes of air pollution each year, with most occurring in the warmer months.

Pollutant emissions estimates for stationary industrial sources operating within the 20 counties in the Gulf Coast study area are substantial. However, the estimates are assumed to represent only a portion of the total pollutant emissions. Air pollutant emissions from automobiles and urban activities are also substantial in these counties. Improvements in air quality of the region include no reportable lead in airborne particulate emissions estimates.

Annual emissions of toxic air contaminants are also substantial for the Texas Gulf Coast area. This reflects the effects of heavy industry (largely petrochemical) concentrated in areas around Port Arthur, Houston-Galveston, and Corpus Christi. Mobile (vehicular) sources of certain air toxics are estimated to be in excess of the respective chemical releases from stationary industrial sources. In summary: 176,218 tons of sulfur dioxide (SO_2), 21,805 tons of total suspended particulates (TSP), 397,034 tons of nitrogen dioxide (NO_2), 95,814 tons of carbon monoxide (CO), and 157,564 tons of volatile organic compounds (VOC) are generated each year within the 20-county study area of the Texas Gulf Coast based on 1997 data. Toxic air emissions in the 20-county study area were in excess of 86 million pounds in 1996 from reporting facilities.

In overall air quality, the USEPA Pollutant Standards Index for Harris County indicates that nearly half (48 percent) of the days in 1997 and 45 percent through four months of 1998 are rated less than "good". Within that same time period, the percentage of "unhealthful" air quality days was 12 percent in 1997.

3.1.4 Surface Water Resources

Eleven major river basins and eight coastal basins are located in or drain a portion of the Texas Gulf Coast study area. Twenty-five managed lakes and reservoirs are located in the Texas Gulf Coast region. The Gulf Coast of Texas encompasses over 624 miles of shoreline on the Gulf of Mexico. Appropriate water uses (such as aquatic life, contact recreation, oyster waters, etc.) are designated for each of these classified surface water segments.

In December 1997, the TNRCC announced its plans to implement a statewide initiative to improve water quality with the cooperation of local, state, and Federal agency partners. This initiative involves the development and implementation of "total maximum daily loads" (TMDL) in watersheds which are used to measure the amount of pollution a water body can receive and still meet surface water quality standards for its designated uses. TMDLs are developed and implemented for impaired water bodies in which standards are exceeded for specific pollutants.

Water quality assessments for the Texas Gulf and Rio Grande hydrologic regions indicated that the major causes of stream/riverine excursions included fecal coliform bacteria, organic enrichment/dissolved oxygen, nutrients, salinity/total dissolved solids/chloride, and toxics (including pesticides, metals, and priority organics). Major sources of pollutants contributing to non-attainment of uses were municipal and industrial point sources.

The major uses of water in the study area are municipal (public and domestic), manufacturing (industrial), steam-electric power, mining (e.g., recovery of crude petroleum), irrigation, and livestock. Surface water use in Texas is expected to increase from 7.1 million acre-feet in 1994 to 10.3 million acre-feet by the year 2050. Municipal use of this water is projected to increase from approximately two million acre-feet (1994) to nearly five million acre-feet by 2050. The increase of surface water supply development is necessary to accommodate decreases in groundwater availability due to over-pumping and decreasing groundwater quality.

Surface water provides the Houston region with 67 percent of its water demands but is projected to supply over 80 percent by the year 2050 due to imposed limitations on groundwater use. Large pipelines, distribution systems, and treatment facilities are planned for transporting imported water supplies to meet these needs. Another concern in this region is adequate freshwater inflows to ecological systems along the coastal area.

The Coastal Bend region that includes the Nueces and San Antonio River Basins is projected to increase its water use nearly 61 percent by 2050. Municipal and industrial usage accounts for most of this increase. There are insufficient resources within the region to provide water for these projections. A freshwater pipeline is under construction from Lake Texana to provide additional water to the city of Corpus Christi. Additional supplies are needed, particularly in the event of extended drought periods.

The Lower Rio Grande region is one of the fastest growing areas in the state and is also a major agricultural area that used nearly 10 percent of the State's water in 1990. A decline in agricultural water use but increases in municipal uses is forecast for this region. Surface water is distributed through existing open canal systems throughout the Lower Rio Grande Valley. Concerns regarding contamination of these open systems and the need for treatment facilities are the focus of regional planners. Water allocations in the region are dictated by international agreements and supplies extend from Falcon and Amistad International Reservoirs.

3.1.5 Groundwater Quality

Within the Texas Gulf Coast segment of the study area, the Gulf Coast aquifer system underlies an area from the coastline to 100 miles inland and extends from the Rio Grande Valley northeastward into Louisiana. Groundwater is the primary source of drinking water in the study area.

Groundwater assessments within the study area for the Gulf Coast Aquifer indicate that the most common sources for potential contamination include: (1) current groundwater withdrawals, particularly for municipal and manufacturing purposes, and a corresponding decline in artesian pressure which have caused land surface subsidence, saline water encroachment, surface fault activation, and serious water level declines; (2) high chloride levels east of the San Marcos Arch with increased chloride/sulfate concentrations west of the Arch that exceed Secondary Drinking Water Standards; (3) higher levels of total dissolved solids (range 1,000-1,500 milligrams per liter [mg/l]) with levels exceeding 10,000 mg/l in the southern part of the aquifer; (4) organics (hydrocarbons), metallic substances, inorganic acids, microorganisms, and radionuclides from confirmed leaking underground storage tanks (LUST); (5) hazardous wastes from Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), and Underground Injection Control (UIC)

sites; (6) scale or corrosion inhibitors from air conditioning return flow wells in the upper portion of the aquifer; and (7) natural/man-made low levels of nitrate that continually exceed the Federal drinking water standards in some areas.

Other potential sources of pollution are untreated or partially untreated wastewaters and industrial wastes which may pose a risk to transboundary groundwater. Some regions of the border area, namely where waters flow into rivers that form the international boundary between Mexico and the U.S., have inadequate management and treatment facilities for wastewater and industrial/hazardous wastes. Within the study area, the sister cities of Matamoros/Brownsville are considered as one of the major contributors of waste discharges into the Rio Grande.

3.1.6 Vegetation Communities

The study area contains several vegetation communities defined on the basis of the interaction of geology, soils, physiography, and climate. These consist of the following: (1) gulf prairies and marshes, (2) pineywoods, (3) post oak/savannah, and (4) south Texas plains.

In addition to vegetation communities, numerous types of invertebrates and non-vascular plants form an extensive biotic community within the various shoreline habitats along the Texas Gulf Coast. The shoreline consists of the following types of shore communities: (1) hard shore, (2) soft shore, and (3) subtidal sands and banks.

3.1.7 Threatened/Endangered Species and Critical/Sensitive Habitats

A total of 24 Federal endangered, threatened, or candidate species occur or potentially occur within the study area. Of these, 17 species are listed as endangered, four as threatened, and three as a candidate species. The state of Texas lists 21 endangered species (six plants, one amphibian, three reptiles, seven birds, and four mammals) and 45 threatened species (four fish, five amphibians, 12 reptiles, 17 birds, and seven mammals) within the study area.

One Federally-designated critical habitat (land, water, and air) exists for the whooping crane in the Arkansas National Wildlife Refuge, and the area encompassing the Lower Rio Grande Valley National Wildlife Refuge is deemed as sensitive habitat.

3.1.8 Unique or Sensitive Area

A wide variety of unique or sensitive areas exists along the Texas Gulf Coast. These include resacas, springs, coastal barriers and estuaries, wild and scenic rivers, and wetlands.

Resacas are old abandoned river channels which occur throughout the Lower Coast area of the Texas Gulf Coast. Examples include the Bayside Resaca Area and Playa del Rio. Springs are the conduits through which surplus groundwater passes. The study area of the Texas Gulf Coast consists of many seeps (87) and small springs. Coastal barriers are offshore ridges are found all along the Texas coast. Examples include Padre Island, Matagorda Island, and Galveston Island. Valuable coastal estuaries such as Laguna Madre are associated with the barrier islands and mainland coastal region.

In addition, only about five percent of the original Southern Texas Tamaulipan brush habitat remains, making this a very sensitive and valuable habitat.

A wide variety of wetland types exist within the study area. General wetland categories include bottomland hardwoods, riparian systems, coastal wetlands, and coastal pothole wetlands. Approximately 13,000 acres of coastal wetlands exist within the Gulf Coastal Plains Province. Region 2 of the USFWS has compiled a list of priority and candidate wetland sites within the Texas Gulf Coast. Based on this information, 17 priority wetlands and 29 candidate wetlands exist within the Texas Gulf Coast study area.

3.1.9 Hazardous Waste

A total of 5,151 sites were identified in the Texas Gulf Coastal study area including: 148 CERCLA sites, 150 RCRA violation and corrective action sites, and 4,853 LUST sites. Another potential source of pollution occurring in some regions of the border area is the transboundary movement of hazardous materials/wastes and abandoned, unpermitted, or illegal hazardous waste sites. Within the study area, the sister cities of Matamoros, Mexico and Brownsville, Texas are considered to be high priority locations where the transportation, handling, and disposal of hazardous wastes are a focus of regulatory and public concern. In addition to 86 million pounds of toxic air emissions, over 120 million pounds of toxic emissions to water and land were released in 1996 from reporting facilities throughout the study area.

3.1.10 Socioeconomic Resources

The counties included in the baseline socioeconomic data for the Texas Gulf Coast study area are Orange, Jefferson, Chambers, Harris, Galveston, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron. Cities within the study area containing more than 50,000 people are Houston, Corpus Christi, and Beaumont. Harris County, which includes the Houston metropolitan area, contains 60 percent of the total 5.28 million people in the project area. The overall growth in population during the 1980s was 14 percent and was concentrated in Harris County. The study area varies substantially between urban and rural areas, as exhibited by the population densities ranging from 10 persons per square mile to 1,630 persons per square mile. Approximately 81 percent of the total population is composed of non-Hispanic whites and Hispanics, followed by 16 percent African-Americans.

There are a total of 1.9 million housing units in the study area, with 62 percent located in Harris County. The highest home values and rental rates are found in Harris, Aransas, Victoria, Matagorda, and Nueces counties, while the lowest are near the Mexican border. Vacancy rates are lower in the eastern counties and highest in the counties closest to the Mexican border.

The Texas Gulf Coast area had total employment of 2,551,655 in 1997 and an unemployment rate of 7.9 percent in 1997 for the 20 counties combined. Its economic base is diverse with the largest sectors consisting of services, manufacturing, construction, and transportation. Agriculture and fisheries are also important although they do not comprise a large portion of total employment. The income distribution is also dominated by the manufacturing, services, and construction sectors.

3.1.11 Cultural Resources

Within the Texas Gulf Coast Plain, prehistoric occupations occur mainly as open-air sites situated on either Holocene alluvial terraces adjacent to streams and rivers or on the broad upland remnants of Pleistocene alluvial terraces (Black 1989). Site locations in the interior zone appear primarily in a savanna or coastal plain environment and were occupied for shorter periods of time in comparison to those farther north in central Texas where permanent sources of water were more abundant (Hester 1981; Black 1989).

Along the coast, archeological sites are found associated with the complex coastal network of estuaries and bays. Based on a maritime adaptation, sites and artifacts within this area are markedly different than those of the interior savanna and coastal plains (Hester 1981, 1989; Black 1989). The coastal sites occur mainly along the protected estuaries and bays where abundant marine resources were exploited in this low energy environment. The proximity of the interior savannas to the coastal strip has been suggested as an additional source of food for the coastal oriented groups especially on a seasonal basis when populations may have moved between the two areas (Hester 1981). The archeological documentation of this patterning has proved elusive, however, and the exact relationships between the inland and coastal regions are at this time still unknown (Collins and Bousman 1990).

A wide range of both prehistoric and historic sites exists in the Texas Gulf Coastal Plain. The number of listed sites on the National Register of Historic Places (NRHP) and State Archeological Landmarks varies widely from county to county due to the number of projects completed in the counties rather than the actual number of significant sites and landmarks that may exist there. Historic buildings comprise the majority of the NRHP sites in the Texas Gulf Coastal Plain. Historic site types include forts, shipwrecks, plantations, lighthouses, depots, battlefields, battlefield cemeteries, towns, ranches, homesteads, churches, and trading posts.

The types of prehistoric sites differ significantly between the interior and coastal areas. The primary site type found in the interior portions of the study area is the thin deposit, open-air site. The lack of soil development, coupled with erosion and land clearing, has resulted in a great number of these sites being left exposed and unprotected on present-day surfaces. Due to the lack of soil development, often compounded by deflation and a shorter occupation span, there are very few stratified sites within the Texas Gulf Coastal Plain area. Indeed, it is not unusual to find a site with mixed surface deposits dating from the late Paleo-Indian period through the Late Archaic and Late Prehistoric periods.

Although sites within the major river valleys can occur in various locations and may vary more in character than those situated farther inland, these sites tend to be concentrated within the riparian zones. In these areas, there is some evidence for specialization between larger campsites closest to the drainages and foraging sites farther away from the perennial streams (Hester 1981; Bousman et al. 1990). Quarry workshops along gravel outcrops also have been documented in association with this kind of settlement pattern (Hester 1981).

Within the wetland regions of the coast itself, shell middens and dune occupations are the dominant site types. Shell middens occur mainly on the margins of the protected estuary bays within the range of brackish to saltwater, suggesting that the placement of these sites was determined by the presence of desired saltwater species. Clay dunes represent another site type characterized by small rises along the bays and associated drainages (Hester 1980). The clay dunes are composed of accumulations of fine, windblown sediments, which on the downwind side, have been scoured out. The scoured depressions are usually filled with water derived from seasonal rains, while the adjacent dunes provide an elevated area ideal for camping. The location of the clay dunes near freshwater creeks that flow into estuary systems also provides an optimal area for hunting, fishing, and fowling.

3.2 TEXAS LAND BORDER (VOLUME 2)

3.2.1 Geological Resources

The Texas Land Border project study area lies within three physiographic provinces: the Southern Gulf Coastal Plains (a nearly level to rolling, slightly to moderately dissected plain); the Edwards and Stockton Plateau of the Great Plains (a deeply dissected, rapidly drained stony plain having broad to undulating

divides with woodlands and grassy prairie); and the Basin and Range (broad interior drainage basins interspersed with scattered fault-block mountain ranges). This information remains the same as the 1994 study.

Surface geology consists of broad sub-parallel bands of Cenozoic and Quaternary sedimentary rocks in the Southern Gulf Coastal Plains Province; alternating layers of limestone, shale, and marl in the Great Plains Province; and Quaternary unconsolidated material in the Basin and Range Province.

Mineral resources within the study area are generally limited to energy resource development activities. Oil and/or gas, coal, mercury, and smaller amounts of gold, silver, lead, zinc, copper, and uranium have been identified. Impacts to soil and groundwater from abandoned production operations and waste from both exploration and development are evident within the study area.

3.2.2 Soils

Twenty-one soil associations occur within the limits of the study area. The soils of the study area range from nearly level to hilly and are varied in texture, with sands, loams, and clays present. The majority of the soil associations present have a slight-to moderate level of erodability. Limitations to construction vary depending upon locational factors and types of construction activity.

3.2.3 Air Quality

The 17 counties of the Texas Southern Gulf Coastal Plains Province of the study area fall into four Air Quality Control Regions (AQCR) established by the USEPA for air quality planning purposes. None of the areas in the Texas Southern Gulf Coastal Plains Province were found to be reported as in non-attainment of NAAQS. Pollutant emissions estimates for industrial sources operating within these 17 counties are relatively low. Only four of the 17 counties included in the Texas Southern Gulf Coast study area had reported emissions of toxic air pollutants for 1996. These data represent only those emissions from certain kinds of industrial sources required under Section 313 of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and do not include toxic substances emitted from mobile sources or area sources (e.g. open burning). In summary, 3,063 tons of sulfur dioxide (SO_2), 1,402 tons of total suspended particulates (TSP), 6,689 tons of nitrogen dioxide (NO_2), 5,380 tons of carbon monoxide (CO), and 787 tons of volatile organic compounds (VOC) are generated each year within the 17-county study area of the Texas Southern Gulf Coast based on 1997 data. Toxic air emissions in the 17-county study area were in excess of 1.3 million pounds in 1996 from reporting facilities.

The USEPA Pollutant Standards Index for Texas Southern Gulf Coast counties indicates that over 90 percent of the days throughout the year are rated as having "good" air quality.

The nine counties of the Great Plains Province study area fall into three AQCRs established by the USEPA for air quality planning purposes. None of the areas in the Texas Great Plains Province were found to be reported as in non-attainment of NAAQS. Pollutant emissions estimates for industrial sources operating within the nine counties are relatively low. In summary, 13,219 tons of SO_2, 548 tons of TSP, 8,284 tons of NO_2, and 1,769 tons of VOC are generated each year within the 9-county study area of the Texas Great Plains study area based on 1997 data. Val Verde County in the nine county area reported approximately 125,000 pounds of toxic air emissions for 1996. Transport of pollutants, especially fine particulates, into the study area contributes periodically to air quality degradation. An air parcel trajectory analyses and filter analyses from samplers in NPS areas reported that during some periods of poor visibility in areas such as Big Bend National Park, sources as far away as Monterrey, Mexico and the Texas Gulf Coast may

significantly contribute to the degradation in visibility. None of the areas in the Texas Great Plains Province were found to have been evaluated by the Pollutant Standards Index method.

The six counties of the Texas Basin and Range Province study area fall within the USEPA's El Paso-Las Cruces-Alamagordo Interstate Air Quality Control Region. The El Paso county area in the Texas Basin and Range Province was found to be in non-attainment for ozone (O_3), and portions of the City of El Paso exceed the standards for respirable particulate matter (PM_{10}) and carbon monoxide (CO), as established under the NAAQS. Pollutant emissions estimates for industrial sources operating within these six counties are relatively low. In summary: 7,011 tons of SO_2, 697 tons of TSP, 7,174 tons of NO_2, 2,069 tons CO, 1,651 tons of VOC, and 6.6 tons of lead are generated each year within the nine-county study area of the Texas Great Plains study area based on 1997 data.

The airshed along the Texas Land Border encompasses a largely rural and undeveloped area. The air quality is generally good, except for occasional dust storms. However, there are some substantial air pollution problems associated with urbanization and industrialization in the larger border "sister cities" of Juarez-El Paso. Many studies have shown that the majority of high pollution periods occur in winter months during air stagnation conditions when air flows down and into their common valley from both sides of the border and becomes trapped throughout the evening hours.

Facilities in El Paso County reported total air toxic (combined fugitive air and stack air emissions) releases of 491,197 pounds. A major air quality concern is the emission of VOCs from plants manufacturing electronic and electric equipment, transportation equipment, and furniture. VOCs are major precursors of ozone formation and may be toxic substances. Other major sources of air pollutants in the Juarez - El Paso area are mobile sources including vehicle emissions. Area sources also contribute significantly to air quality problems in the Juarez - El Paso region by emitting large quantities of particulate matter and carbon monoxide. Many residences in the Mexican border region burn non-conventional fuels such as wood scraps, cardboard, and tires to provide warmth in winter. Under certain meteorological circumstances, these emissions can produce dangerously high levels of pollutants.

The USEPA Pollutant Standards Index for Texas Basin and Range counties indicates that El Paso air quality was less than "good" during about 40% of the days reported in 1997 and 1998. Other regions of the Texas Basin and Range study area were found to have "good" air quality 97% of the time during years 1997 and 1998.

The TNRCC has implemented a number of VOC controls in El Paso. The New Source Review Permits Division of the TNRCC develops enforcement programs for major stationary sources, while the Inspection and Maintenance Program of the TNRCC targets mobile sources. In addition, Mexico is imposing emissions controls in Juarez. Only oxygenated fuel can be sold in El Paso County from October through March when CO levels are highest.

3.2.4 Surface Water Quality

The Texas Southern Gulf Coastal Region contains the Nueces River and its tributaries. The Rio Grande basin contains the Rio Grande basin including the International Falcon Reservoir and the Arroyo Colorado, a major drainage in the Lower Rio Grande Valley, which is used mainly as a diversion canal for irrigation of agricultural crops. In addition, there is one major estuary (Laguna Madre) located in the study area along the Texas coast. Nearly 300 Surface Water Quality Monitoring Stations are located on segments of surface waters in the South Gulf Coastal Plains Province.

Water quality assessments for the Texas Gulf Coast and Rio Grande hydrologic regions indicated that the major causes of stream/riverine non-attainment included fecal coliform bacteria, organic

enrichment/dissolved oxygen, nutrients, salinity/total dissolved solids/chloride, and toxics (including pesticides, metals, and priority organics). In the Texas bays and estuaries, the major causes of use impairments were identified as fecal coliform bacteria and toxics (including metals and priority organics). Major sources of pollutants contributing to non-attainment were municipal and industrial point sources. Other sources of potential pollution are untreated or partially treated wastewater discharges. Some regions of the border area, namely where waters which cross the border or flow into rivers that form the international boundary between Mexico and the U.S., unsanitary conditions exist due to inadequate treatment or collection facilities. Within the study area, the sister cities of Matamoros/Brownsville, Reynosa/McAllen, Nuevo Laredo/Laredo, and Piedras Negras/Eagle Pass are considered as major contributors of waste discharges into the Rio Grande. In addition to Matamoros and Tamaulipas, another 20 municipalities in Mexico are also considered as major contributors of waste discharges into the Gulf of Mexico.

The Upper Nueces River showed no significant water quality problems. The Brownsville Ship Channel in the coastal water basin exhibited good water quality. The major uses of water are municipal (public and domestic), manufacturing (industrial), steam-electric power, mining (e.g., recovery of crude petroleum), irrigation, and livestock.

Surface water in the Great Plains of Texas is predominantly located in the Rio Grande basin which includes the International Amistad Reservoir, and portions of the Devils and Pecos Rivers. The International Amistad Reservoir with a surface area of 64,900 acres provides water conservation storage (3,383,900 acre-feet) and flood control in Val Verde County. Within the surface water basin of the nine-county Texas Great Plains study area, the Devils River showed no significant water quality problems. The International Amistad Reservoir is characterized as having excellent water quality.

Surface water in the Texas Basin and Range Province is located in the Rio Grande basin, which includes the Upper Rio Grande basin. San Estaban Lake is the area's largest lacustrine body of water with a surface area of 762 acres providing water conservation storage (18,700 acre-feet) and flood control in Presidio County. In El Paso County, the Rio Grande's water is diverted into a series of canals (i.e., American, Hudspeth, Riverside, Franklin) for domestic and irrigation use.

Water quality assessments for the Rio Grande hydrologic region indicated the major causes of stream/riverine non-attainment included fecal coliform bacteria, organic enrichment/dissolved oxygen, nutrients, salinity/total dissolved solids/chloride, and toxics (including pesticides, metals, and priority organics). The relative contribution from sources to the non-attainment are municipal and industrial point sources, non-point sources, natural, and unknown. In some regions of the border area, namely where waters which cross the border or flow into rivers that form the international boundary between Mexico and the U.S., have unsanitary conditions due to inadequate treatment or collection facilities. Within the study area, the sister cities of Ciudad Juarez/El Paso and Ojinaga/Presidio are considered as major contributors of waste discharges into the Rio Grande.

3.2.5 Groundwater Quality

The two main aquifers in the 17-county Texas Southern Coastal Plains study area are the Gulf Coast and Carrizo-Wilcox systems. The Gulf Coast aquifer system underlies an area from the coastline inland 100 miles and extends from the Rio Grande Valley northeast into Louisiana. The Carrizo-Wilcox is one of the most extensive aquifers in Texas and supplies water for all categories of wells from Mexico northeastward into Arkansas and Louisiana.

Groundwater assessments within the study area for the Gulf Coast and the Carrizo-Wilcox aquifers indicate several sources for potential contamination. The most common sources for the Gulf Coast aquifer includes:

(1) current groundwater withdrawals, particularly for municipal and manufacturing purposes, and a corresponding decline in artesian pressure have caused land surface subsidence, saline water encroachment, surface fault activation, and serious water level declines; (2) increased chloride/sulfate concentrations that exceed Secondary Drinking Water Standards; (3) higher levels of total dissolved solids with levels exceeding 10,000 (mg/l); (4) organics (hydrocarbons), metallic substances, inorganic acids, microorganisms, and radionuclides from confirmed LUST; (5) hazardous wastes from Resource Conservation and Recovery Act (RCRA) and Underground Injection Control (UIC) sites; and (6) natural/man-made low levels of nitrate (0-20 percent), except in the counties of Hidalgo, Starr, Brooks, Jim Hogg, and Duval (21-100 percent), and fluoride (0-3 percent), except in Hidalgo and Starr counties (4-10 percent) and Willacy County (11-20 percent), that continually exceed the Federal drinking water standards. Groundwater assessments for Carrizo-Wilcox aquifers indicated: (1) small areas of increased chloride/sulfate concentrations exceeding Secondary Drinking Water Standards; (2) higher levels of total dissolved solids with levels exceeding 3,000 mg/l (e.g., Webb County); (3) high iron content ranging from 0.31 - 5.0 mg/l; and (4) natural/man-made low levels of nitrate (0-20 percent), except in Maverick, Kinney, and Uvalde counties (21-40 percent), and fluoride (0-3 percent), except in Uvalde County (4-10 percent), that continually exceed the Federal drinking water standards.

The two main aquifers in the Texas Great Plains study area are the Edwards (Balcones Fault Zone) and Edwards-Trinity (Plateau) systems. The Edwards aquifer system is a very productive aquifer consisting of limestone, dolomite, and marl and is extensively faulted, fractured, and cavernous. Some of the largest springs (e.g., San Felipe) in the state result from the discharge of water from the aquifer. The Edwards-Trinity aquifer consists of sandstone, sand, and clay in the lower part and limestone, dolomite, and marl in the upper part. Springflow from the aquifer sustains much of the base flow of many streams that cross the outcrop. This flow recharges the Edwards aquifer in reaches downstream. Groundwater is the primary source of drinking water in the study area. Groundwater assessments within the study area of the Edwards and Edwards-Trinity aquifers indicate that the common sources for potential contamination include the following: Edwards - (1) increased chloride/sulfate concentrations that exceed Secondary Drinking Water Standards; (2) higher levels of total dissolved solids with levels exceeding 10,000 mg/l; and (3) natural/man-made low levels of nitrate (0-20 percent), except in the counties of Kinney and Uvalde (21-40 percent), and fluoride (0-3 percent), except in Uvalde County (4-10 percent) that continually exceed the Federal drinking water standards; and Edwards-Trinity - (1) increased chloride/sulfate concentrations that exceed Secondary Drinking Water Standards; (2) higher levels of total dissolved solids with levels exceeding 3,000 mg/l (e.g., Kinney County); and (3) natural/man-made low levels of nitrate (0-20 percent), except in the counties of Kinney, Uvalde, Val Verde, Terrell, Pecos, and Brewster (21-40 percent), and fluoride (0-3 percent) that continually exceed the Federal drinking water standards.

The main aquifer in the Texas Basin and Range study area is the Alluvium and Bolson Deposits which is located in many isolated areas. It is an important source for irrigation and public water supply. This unconfined system consists of sand, gravel, silt, and clay and ranges in depth from 100-1,000 feet but may extend to depths of more than 3,000 feet. Groundwater is the primary source of drinking water in the study area. Groundwater assessments within the study area of the Alluvium and Bolson deposits aquifer indicate that the most common sources for potential contamination include the following: (1) increased chloride/sulfate concentrations along the Rio Grande that exceed Secondary Drinking Water Standards; (2) higher levels of total dissolved solids with levels exceeding 3,000 - 10,000 mg/l; (3) natural/man-made low levels of nitrate (0-20 percent), except in the counties of Brewster (21-40 percent), Presidio and Hudspeth (41-60 percent); and fluoride (0-3 percent) that continually exceed the Federal drinking water standards.

3.2.6 Vegetation Communities

Four ecological areas defined on the basis of the interaction of geology, soils, physiography, and climate are found within the study area. These include: (1) gulf prairies and marshes, which is dominated by

herbaceous species; (2) south Texas plains, which is dominated by mesquite associations; (3) Edward Plateau, which contains creosotebush, live oak, mesquite, and juniper in various associations; and (4) Trans-Pecos mountains and basins, which is predominately a mixture of creosotebush-lechuguilla shrub and tobosa-black grama grassland.

3.2.7 Threatened/Endangered Species and Critical/Sensitive Habitats

A total of 96 Federal endangered, threatened, or candidate species occur or potentially occur within the study area. Of these, 66 species are listed as endangered, two as proposed endangered, 14 as threatened, one as proposed threatened, and 13 as candidate species. The State of Texas lists 52 endangered species (18 plants, four fish, 15 birds, three reptiles, and 12 mammals) and 111 threatened species (eight plants, 32 fish, six amphibians, 26 reptiles, 28 birds, and 11 mammals) within the study area (TPWD 1998).

Federally designated critical habitat exists within the study area for whooping crane (Brewster County); Leon Springs pupfish (Pecos County); and gypsum wild buckwheat (Culberson County). In addition, the Lower Rio Grande Valley National Wildlife Refuge (The Wildlife Corridor) and 26 bird rookeries along the lower coast have been deemed as sensitive habitats (USFWS, 1999).

3.2.8 Unique or Sensitive Areas

A wide variety of unique or sensitive areas exists within the study area. These include arroyos, bolsons, huecos, resacas, springs, wetlands, and coastal barriers (i.e., bars, beaches, islands, spits, and peninsulas).

One wild and scenic river, as designated by the USDI, occurs within the study area (USDI 1998). The Rio Grande from Big Bend National Park downstream to the Terrell-Val Verde County line (a total of 191.2 miles) is designated as a wild and scenic river. The wild and scenic portion of the Rio Grande is also considered as being endangered due to massive timber harvesting. The Rio Grande, outside of the wild and scenic portion, is also considered an endangered river (USEPA 1999).

Wetland types within the study area include riverine systems, coastal wetlands (consisting of salt/freshwater marshes, deltas, coastal bays, and estuaries); coastal pothole wetlands, and freshwater springs. According to Region 2 of the USFWS, two priority wetlands (Playa Del Rio, in Cameron County and Capote Falls and Creek in Presidio County) and 11 candidate wetlands that qualify for acquisition under the Emergency Wetland Resources Act of 1986 are located within the study area.

The reach of the Rio Grande between Presidio and Fort Quitman, Texas is known as the IBWC Boundary Preservation Project. Recommendations to preserve the character of this reach were adopted by the United States and Mexico in December of 1976 under IBWC Minute No. 262. Recommendations include a general prohibition against construction within 100 feet of the international boundary, and a provision for a 25-foot vegetated strip along each river bank within this reach.

3.2.9 Hazardous Waste

A total of 1,413 sites were identified in the Southern Gulf Coastal Plains study area: 23 CERCLIS sites, 10 RCRIS violation and corrective action sites, and 1,380 LUST sites. A higher number of the reported sites were found in the counties with historically heavy industrial activity and large urban populations.

Potential sources of pollution from hazardous wastes occurring in some regions of the border area include the transboundary movement of hazardous materials/wastes and abandoned or illegal hazardous waste sites.

Within the study area, the sister cities of Matamoros/Brownsville are considered as a high priority city-pair where the transportation, handling, and disposal of hazardous wastes are a cause of public concern.

Reported releases of toxic emissions from permitted facilities in the Southern Gulf Coastal Plains province totaled approximately 1.2 million pounds.

Counties in the Texas Great Plains province study area are predominately rural with historically low industrial activity and small populations. Within the study area, there are a low number of reported sites. Del Rio in Val Verde County constitutes the largest concentration of documented hazardous waste generators and management sites. One RCRIS site and 63 leaking petroleum storage tank sites were found in the Del Rio area.

A total of 496 sites were identified in the Texas Basin and Range province: six CERCLIS sites, six RCRIS violation and corrective action sites, and 496 LUST sites. Toxic Release Inventory data lists El Paso as an area that generated over 500,000 pounds of toxic substances into air, land, and water in 1996. The other counties of the Texas Basin and Range study area have no reported releases of toxic substances.

3.2.10 Socioeconomic Resources

Because of the expansive area encompassed by the Texas Land Border project area and the diversity of the socioeconomic resources within this area, this discussion is further subdivided into three project subareas based upon the physiographic provinces used in the Environmental Baseline technical support documents (INS/JTF-6 1999).

3.2.10.1 Southern Gulf Coastal Plains Province

The counties included in the baseline socioeconomic data are Cameron, Willacy, Kenedy, Hidalgo, Brooks, Starr, Jim Hogg, Webb, La Salle, Zapata, Dimmit, Maverick, Zavala, Uvalde, Kinney, and Val Verde (Duval County has no significant socioeconomic resources within the border corridor). The total population for 1997 was 1,263,708, with the majority located in Cameron, Hidalgo, and Webb counties. The population growth rate since 1990 was 28 percent, with most activity in Cameron, Hidalgo, Webb, and Maverick counties. The largest ethnic group is Hispanic (87 percent) followed by 12 percent non-Hispanic whites. The largest cities in the study area include Laredo, Brownsville, and McAllen; however, only Laredo has a population larger than 100,000.

There were a total of 329,099 housing units in the study area in 1990. Hidalgo and Cameron counties contained the majority of units as well as the highest vacancy rates. In general, the study area has low median housing values and rental rates when compared to the national averages. However, Webb and Cameron counties have substantially higher values than the other counties.

The unemployment rate in the study area was 15.5 percent, significantly above the national rate. Between counties, unemployment ranged from zero to over 20 percent; the two most populous counties had unemployment rates above 10 percent.

Employment and income distribution are dominated by the governmental and manufacturing sectors. Manufacturing is strongly affected by international trade with Mexico.

3.2.10.2 Great Plains Province

The Great Plains baseline socioeconomic data are for Uvalde, Kinney, Val Verde, Edwards, Terrell, and Brewster counties. Sutton, Crockett, and Pecos counties are not included because they do not contain significant socioeconomic resources within the border corridor. Total population of these counties in 1997 totaled 86,181, with Val Verde and Uvalde counties being the most populated. In general, the study area is sparsely populated, with densities ranging from less than one person per square mile to 15 persons per square mile. One major town, Del Rio, with a population of 34,495, is situated within the Texas Land Border study area. Approximately 63 percent of the population is Hispanic and 35 percent non-Hispanic white.

There are a total of 32,264 housing units in the area and most are located in Val Verde and Uvalde counties. The overall vacancy rate is high (22 percent) and ranges from 15 percent in Val Verde County to 49 percent in Edwards County. As compared to the national figures, the median housing values and rental rates in the study area are low.

Unemployment in the Great Plains counties was 7.58 percent in 1997, which is higher than the national average. The rural counties exhibited low rates while the more populated counties displayed higher unemployment rates. Industries dominating the area's employment and income distribution include the governmental, trade, and transportation sectors. All of these sectors are significantly affected by international trade with Mexico. In addition, the agricultural sector has an important economic role and is also important to trade with Mexico.

3.2.10.3 Basin and Range Province

The counties included in the socioeconomic analysis for the Basin and Range area are Brewster, Presidio, Jeff Davis, Culberson, Hudspeth, and El Paso. Population in 1997 was estimated to be 725,520, with 97 percent of the population living in El Paso County. The City of El Paso is the dominant socioeconomic feature with the remaining counties being rural in nature and sparsely populated. The population growth rate since 1980 has been 23 percent. The dominating ethnic group is Hispanic (69 percent) with non-Hispanic whites making up an additional 26 percent. Consistent with population, El Paso County contains nearly all (94 percent) of the housing units.

Employment in the study area is dominated by El Paso. The overall unemployment rate was 10.12 percent in September 1997, higher than the national average. Economic structure considers only El Paso County, as the remaining counties are predominantly rural and agricultural. The largest economic sectors in El Paso are government and manufacturing, both contributing heavily to employment and income. In addition, trade is important to the economy since El Paso is a main gateway for trade with Mexico.

3.2.11 Cultural Resources

This discussion is further subdivided into two subsections: the South Texas Plains Region and the Trans Pecos Region.

3.2.11.1 South Texas Plains Region

There is a wide range of both prehistoric and historic site types in the South Texas Plains region. The number of listed NRHP sites and State Archeological Landmarks varies widely from county to county. This is not necessarily due to the actual number of significant sites and landmarks that exist there, but rather due to the number of projects completed in each county. Historic site types in the region include the

archeological remains and architectural components from shipwrecks, industrial buildings, opera houses, schools, forts, courthouses and other civic buildings, hotels, bridges, post offices, stores, ranches, and houses.

The types of prehistoric sites found in the South Texas Plains region and the artifacts within them can differ significantly depending upon whether the sites are located in the Rio Grande Plain or Rio Grande Delta area. The primary site type found in the Rio Grande Plain (associated with the interior savanna) is the thin deposit, open-air site. The lack of soil development, coupled with erosion and land clearing, has resulted in a great number of these sites being left exposed and unprotected on present-day surfaces. Due to the lack of soil development, often compounded by deflation, and a shorter occupation span, there are very few stratified sites within the Rio Grande Plain. It is not unusual to find a site with mixed surface deposits dating from late Paleo-Indian times through the Late Archaic and Late Prehistoric periods.

Sites in the Rio Grande Delta can occur in various locations and vary more in character than those within the Rio Grande Plain. On the margins of the Delta, sites tend to be concentrated along the various riparian zones. In these areas, there is some evidence for specialization between larger campsites closest to the drainages and foraging sites farther out from the perennial drainages (Bousman et al. 1990; Hester 1981). Quarry workshops, located along gravel outcrops, are another kind of special activity site situated along the margins of the Delta (Hester 1981).

Within the wetland region of the coast itself, shell middens and dune occupations are the dominant site types. Shell middens occur mainly on the margins of the protected estuary bays within the range of brackish to saltwater, indicating that the placement of these sites was determined by the presence of desired saltwater species. Clay dunes represent another site type characterized by small rises along the bays and associated drainages (Hester 1980). The clay dunes are composed of accumulations of fine, windblown sediments, which on the downwind side, have been scoured out. The scoured depressions are usually filled with water derived from seasonal rains, while the adjacent dunes provide an elevated area ideal for camping. The location of the clay dunes near freshwater creeks that flow into estuary systems also provides an optimal area for hunting, fishing, and fowling.

3.2.11.2 Trans-Pecos Region

A broad range of prehistoric and historic site types are found in the Trans-Pecos region. Due to the difference in the number of projects completed in each county, the number of listed National Register Sites and State Archeological Landmarks varies widely from county to county. Historic site types include courthouses, jails, houses, farms, ranches, mines, churches and synagogues, schools, mills, forts, military water systems, hotels, stage coach stations, emigrant trails, battle sites, missions, train stations, clinics, clubs, theaters, stores, banks, and other commercial buildings.

By far the most common types of prehistoric sites found within the Trans-Pecos region are base camps and campsites. Both types consist of open-air sites principally defined by a scatter of lithics and/or ceramics. Deposits associated with these kinds of sites in the region tend to be surficial, and if containing more than one component, usually are mixed due to soil deflation. In some circumstances, midden deposits may exist on some sites. Within the Puebloan subregion, many of the base camps contain above-ground structures. Base camps outside the Puebloan subregion contain features such as rock hearths, scatters of burned rock, and at times, ring middens (Hedrick 1989). Open campsites in the Trans-Pecos region also are defined principally by a scatter of lithics and/or ceramics, but as opposed to base camps, were occupied only periodically. Examples of campsites would be tool manufacturing and food processing sites.

Rockshelters also can be found in the Trans-Pecos region, especially along the steeper gradients of river valleys, smaller creeks, and springs. Deposits associated with rockshelters tend to be smaller in area but are

often more substantial than deposits at open-air sites. Perishable items such as basketry, cordage, textiles, and wood are often found in these kinds of sites. Petroglyphs are frequently found within or near rockshelters, or can occur as separate entities. In the interior subregion of the Trans-Pecos, quarry sites are common as well, and can occur along any good outcrop of lithic material. Quarry sites are characterized by lithic debris composed of large cores and bifaces and quantities of primary flakes.

Ring middens and rock circles also occur in the interior and plains subregions. Ring middens are defined by a ring of hearthstones 24 to 31 feet in diameter with a deposit of ash in the center (Hedrick 1989). In the interior subregion these kinds of sites may have functioned as roasting ovens for desert succulents such as agave and yucca. Rock circles are represented by smaller rings of unburned stones (one to three meters in diameter) with no interior feature. These particular sites tend to be located in elevated areas and may have served as observation points, perhaps associated with the historic Apache (Hedrick 1989).

3.3 NEW MEXICO LAND BORDER (VOLUME 3)

3.3.1 Geological Resources

The project area along the New Mexico border occurs entirely within the Basin and Range Physiographic Province. This province includes a large portion of the western U.S. and is characterized by block-faulted ranges separated by broad intermontane basins.

Rocks and sediments exposed at the surface in the eastern part of southern New Mexico are predominantly Quaternary alluvium and sand dunes, and lower Permian carbonates and mixed clastic sediments. The surface geology of the central and western parts of southern New Mexico is characterized by an alternation between Quaternary surficial deposits and a varied age range of igneous intrusives, volcanoes, and mixed fragments of older rocks and carbonate sedimentary rocks.

Southern New Mexico contains an abundance of valuable mineral resources including: copper, silver, gold, lead, and iron. Mining activities, especially those that are now inactive and that predate the current regulatory climate, are of particular concern. Abandoned mine sites, which are scattered throughout the study area, have the potential to impact surface and groundwater features.

3.3.2 Soils

Twenty-two soil associations occur within the limits of the study area. The soils of the study area are varied in texture and range from fine sands to clay loams. Of the 22 soil associations present, 10 have a low to moderate level of erodability and 12 have a low to severe level of erodability. Limitations to construction varies geographically depending upon the soil association(s) encountered. The soil characteristics remain the same from the 1994 document (U.S. Army 1994).

3.3.3 Air Quality

The State of New Mexico has adopted the National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50) as the state's air quality criteria. New Mexico also has additional standards for sulfur dioxide (SO_2), hydrogen sulfide, carbon monoxide (CO), and nitrogen dioxide (NO_2). New Mexico has also adopted standards for total suspended particulates (TSP) as one combined category.

The five counties in the New Mexico study area fall into two Air Quality Control Regions (AQCRs) established by USEPA for air quality planning purposes. Three regions in the New Mexico study area are

Federally designated as in non-attainment of criteria pollutant standards. These are: the town of Anthony in Doña Ana County classified as non-attainment (moderate) for PM_{10} with wind-borne soil identified as the major contributing factor; an area around a copper smelter in Grant County, listed as non-attainment for SO_2; and Sunland Park in Doña Ana County for ozone (marginal). A summary of 1997 emissions of criteria pollutants in the New Mexico Land Border study area is as follows: 46,905 tons SO_2, 1,420 tons of TSP; 6,901 tons of NO_x; 3,611 tons CO; and 264 tons VOC.

Industrial sources operating within the New Mexico Basin and Range study area that had reported emissions of toxic air pollutants for 1996 totaled nearly 800,000 pounds. They do not include toxic substances emitted from mobile sources or area sources (e.g. open burning).

Transport of pollutants, especially fine particulates, into the study area also contributes periodically to air quality degradation. Air parcel trajectory analyses and filter analyses from samplers in NPS areas near the border reported that during some periods of poor visibility in areas such as Carlsbad Caverns and Guadalupe Mountains National Parks, sources as far away as Monterrey, Mexico and the Texas Gulf Coast may be significantly contributing to the degradation in visibility.

The USEPA Pollutant Standards Index for the New Mexico Basin and Range study area counties indicates that over 90 percent of the days throughout the year are rated as having "good" air quality except in Doña Ana County. In 1997, 42 percent of the days were reported as having "moderate" air quality and in 1998, 34 percent for Doña Ana County.

3.3.4 Surface Water Quality

Surface water in the New Mexico Basin and Range Province is located in two major hydrologic regions: the Rio Grande Region, which contains the Closed, Lower Rio Grande, and Southwestern Closed Basins, and the Lower Colorado Region, which contains the Lower Colorado River Basin. The Mimbres River basin and Playas basin of the Southwestern Closed Basins are in topographically closed basins where the drainage does not leave the basin. The Playas basin, during seasonal flooding, contains shallow lakes that when dry become vast salt playas. Other streams within the study area are intermittent or ephemeral. There are no reservoirs in the study area with a capacity of 5,000 acre-feet that are used for conservation and flood storage.

The purpose of state water quality standards is to designate the uses for which the surface waters of the State of New Mexico shall be protected and to prescribe the water quality standards necessary to sustain the designated uses. These standards are consistent with Section 101(a)(2) of the Federal Clean Water Act, as amended, (33 U.S.C. 1251 et seq.) which declares that "it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983...."Agricultural, municipal, domestic and industrial water supply are other essential uses of New Mexico's water; however, water contaminants resulting from these activities will not be permitted to lower the quality of streams below that which is required for recreation and maintenance of a fishery, where practicable. Part 3 of the Commission Regulations includes standards to protect ground water and regulations controlling discharges onto or below the surface of the ground.

The Rio Grande between Leasburg Dam and the New Mexico-Texas border cannot fully support the designated uses of warm water fisheries and irrigation. The portions of the Mimbres River that occur in the study area are threatened for the designated use of cold water fishery. These segments are included on the List of Assessed Stream and River Reaches submitted pursuant to Section 303(d) of the Federal Water Pollution Control Act.

The major uses of water in the study area are public water supply, self-supplied domestic, irrigated agriculture, livestock, self-supplied commercial, industry, mining, power, and reservoir evaporation.

3.3.5 Groundwater Quality

Within the study area two major aquifer types, valley-fill and basin-fill, supply most of the useful groundwater and are comprised mostly of sand, gravel, silt, and clay. The Rio Grande Valley, Las Cruces Area aquifer is a valley-fill unconfined system that consists of alluvial and terrace deposits. It ranges in depth from 50-200 feet but may exceed 500 feet. Yields from this aquifer range from 100-500 gallons per minute with maximum yields exceeding 3,000 gallons per minute. The Rio Grande Basin and Southwestern New Mexico aquifers are basin-fill unconfined/confined aquifers which consist of fluvial, lacustrine, and eolian deposits. These range in depth from 100-500 feet but may exceed 3,000 feet. Yields from these aquifers are similar to the Rio Grande Valley, Las Cruces area aquifer. Eight of the 32 groundwater basins in New Mexico are located in the study area: Tularosa, Hueco, Lower Rio Grande, Mimbres Valley, Lordsburg Valley, Playas Valley, Animas, and San Simon.

Groundwater assessments within the study area for the Rio Grande Valley, Las Cruces Area aquifer and the Rio Grande Basin and Southwestern New Mexico aquifers indicate that the most common sources for potential contamination include: (1) high nitrate and ammonia levels or anoxic contamination from sewage treatment plants, individual septic systems, fertilizer use, and dairy waste-disposal systems; (2) salinity from oil, gas, and mineral production; (3) trace and gross level inorganic compounds (i.e., sulfate, total dissolved solids [TDS]) from mining and mineral milling; (4) increased TDS and pesticides (e.g., carbamate) levels from agricultural irrigation (e.g., Rio Grande Valley); (5) synthetic organic compounds from commercial and industrial sites; (6) refined petroleum products (e.g., oils, gases, fuels) from service stations, petroleum refineries, highway spills, and leaking underground and above ground storage tanks and pipelines; and (7) hazardous wastes from Comprehensive Environmental Response, Compensation and Liability Act (CERCLA - Doña Ana County), Resource Conservation and Recovery Act (RCRA), and Installation Restoration Program (IRP) sites.

3.3.6 Vegetation Communities

Five vegetation communities defined on the basis of the interaction of geology, soils, physiography, and climate are found within the study area. These include: (1) forest, (2) woodland-savanna, (3) grassland, (4) scrubland, and (5) riparian. These communities have not changed since the 1994 document (U.S. Army 1994).

3.3.7 Threatened/Endangered Species and Critical/Sensitive Habitat

A total of 21 Federal endangered, threatened, and candidate species occur within the study area. Eleven species are listed as endangered, six are listed as threatened, and four as candidate species. The state of New Mexico lists 24 endangered species (four reptiles, two amphibians, 10 birds, three fish, one mollusks, and four mammals), 44 threatened species (six reptiles, two amphibians, 19 birds, five fish, five mollusk, and seven mammals) and restricted species (one mammal) within the study area (New Mexico Department of Game and Fish 1998).

One Federally designated critical habitat exists for the New Mexican ridge-nosed rattlesnake in the Peloncillo Mountains in the Coronado National Forest and in the Animas Mountains in Hidalgo County. A variety of Federal sensitive habitats occur in the study area including habitats for desert bighorn sheep, Mexican duck, Iranian ibex, and Sneed's pincushion cactus; three research natural areas; three designated

Wilderness Study Areas; 13 Areas of Critical Environmental Concern; 12 areas designated as HMP areas; and one National Natural Landmark.

3.3.8 Unique and Sensitive Areas

A wide variety of unique or sensitive areas exist within the study area. These include playas located in Hidalgo and Grant Counties, springs along the Rio Grande and Mimbres Rivers, the San Simon Cienega in Hidalgo County, arroyos throughout the Basin and Range Province, and a large area of "sand dunes" west of Las Cruces.

The Rio Grande in New Mexico is considered an endangered river due to pollution from cyanide-leaching mining operations, drainage, overgrazing, agricultural water diversions, silt-laden flows, and plutonium and other types of nuclear waste (USEPA 1999).

Wetland types within the study area include riverine and riparian ecosystems, playa lakes, desert springs, and cienegas. Approximately 12,756 acres of wetlands occur within the Basin and Range Province. According to Region 2 of the USFWS, none of New Mexico's priority/candidate wetlands in the study area qualified for acquisition under the Emergency Wetland Resources Act of 1986. In addition, the BLM has designated eleven riparian areas in the Mimbres Resource Area.

3.3.9 Hazardous Waste

A total of 155 hazardous waste sites were identified in the New Mexico Land Border study area: 17 CERCLA sites, 5 RCRA violation and corrective action sites, and 133 LUST sites.

Reported releases to air and land of toxic waste from permitted facilities in 1996 totaled nearly 18 million pounds in the New Mexico study area. No releases of toxic substances to water resources were reported.

3.3.10 Socioeconomic Resources

The counties included in the socioeconomic baseline data for the New Mexico study area are Otero, Doña Ana, Luna, Grant, and Hidalgo. Population in 1997 was estimated to be 285,855, with over half located in Doña Ana County. Las Cruces and Alamogordo are the main population areas which could be affected by INS and JTF-6 activities, as the remainder of the study area is largely Federally managed and rural in nature. While the ethnic mix of the area is largely Hispanic and non-Hispanic whites, there is a substantial population of Native Americans (the Mescalero Apache Indian Nation) in Otero County. Consistent with the largest population areas, the majority of housing units are also located in Doña Ana and Otero counties.

Employment varies among counties; however, for the study area in general, Federal, state, and local government jobs account for one third of total employment. Other leading employment sectors include service, retail trade and manufacturing. Similar to employment, the governmental sector accounts for the largest share of income, followed by service and manufacturing. Doña Ana and Hidalgo counties exhibit the highest median family income, while Luna County has the lowest.

3.3.11 Cultural Resources

What is known about the prehistoric and historic occupation of southern New Mexico is the result of extensive surveys and a few excavation projects. The survey projects have provided information on 10,965 sites in the Archaeological Records Management System (ARMS) and Fort Bliss databases combined (U.S. Army 1994). Only a small number of sites are on the NRHP or the State Register of Cultural Properties;

however, the majority of sites were considered to be potentially eligible for inclusion to the NRHP (U.S. Army 1994). These include historic buildings and districts in Las Cruces, Deming, Columbus, and Lordsburg; a few military forts and other isolated properties; and a series of Animas-phase sites in the New Mexico Bootheel. There are several protected archeological districts within the Fort Bliss Military Reservation. Surveys related to the recent reconstruction of the border roads revealed the presence of numerous sites of both the prehistoric and historic occupations of the region. Many of these sites are considered eligible for inclusion on the NRHP.

All of the prehistoric properties presently listed on the NRHP are large habitation pueblos located in the New Mexico Bootheel. The sites date to the Animas phase (circa A.D. 1150-1300). The variety of historic period properties on the NRHP reflects the history and settlement of the region. Private residences, commercial buildings, and civic (e.g., courthouses, post offices) and educational (e.g., school and university) buildings make up approximately half of the listings. Historic district and townsite listings include the Alameda-Depot, Mesquite Street Original Townsite, and Mesilla Plaza districts in Doña Ana County; the Village of Columbus and Camp Furlong in Luna County; and Shakespeare Ghost Town in Hidalgo County. Military forts (e.g., Fort Selden), engineering structures (e.g., American Diversion Dam and International Boundary Marker Number One), religious buildings, and other properties (e.g., mines, springs, a stage station) make up the rest of the register listings.

3.4 ARIZONA LAND BORDER (VOLUME 4)

3.4.1 Geological Resources

The project study area along the Arizona Land Border lies within the Basin and Range Physiographic Province and is characterized by intensely deformed and intruded strata within numerous relatively elevated and depressed fault blocks. The Basin and Range Province, in the study area, is subdivided into two physiographic sub-provinces, the Mexican Highlands, and the Sonoran Desert.

The complex geologic history of the area, including multiple episodes of tectonic activity and marine transgression/regression sequences, has resulted in a highly varied outcrop pattern of relatively small outcrops of rock which represent a time passage of over 1.8 billion years.

Mineral resources in southern Arizona include vast amounts of copper with lesser amounts of other associated precious and base metals (i.e., gold, mercury, manganese, zinc, and lead). Mining is accomplished by leaching, which concentrates the relatively low grade ore. Low concentration, open pit mining practices result in mountains of tailings. Mining activities are widespread in the southern part of the state including areas in western and southern Cochise County, southern Santa Cruz County, central and northeast Yuma County, and south central Pima County.

3.4.2 Soils

Soil composition and other attributes are a function of source material, climate, and topography. Within the study area, there are 44 general soil associations which can be grouped by topography. Levels of erodability vary according to location and steepness of slope. High erodability is associated with mountain and upland/foothill areas. Shrink-swell potential tends to be highest in depositional areas, such as valley slopes and alluvial fan/valley floors where soils tend to consist of higher clay contents.

3.4.3 Air Quality

The State of Arizona has adopted the NAAQS as the state's air quality criteria. As of July 18, 1997, USEPA revised two standards, ozone and particulate matter, to ensure a more effective and efficient protection of public health and the environment. These revised standards are an 8-hour ozone standard of 0.08ppm, a 24-hour $PM_{2.5}$ (particulate matter with a diameter of 2.5 microns or smaller) standard of 65 micrograms per cubic meter and an annual $PM_{2.5}$ standard of 15 micrograms per cubic meter. At that time, USEPA also revised the form (but not the level) of the annual and 24-hour PM_{10} standard. Under the revised form of the PM_{10} standard, Arizona recommended to USEPA that only the current Phoenix PM_{10} non-attainment area be designated non-attainment. Arizona will be recommending area designations for the revised ozone and new $PM_{2.5}$ standards by July 1999.

The counties in the Arizona study area are within the Intrastate Air Quality Control Regions (IAQCR) for air quality planning purposes as follows: Cochise and Santa Cruz counties - Southeast Arizona IAQCR, Pima County - Pima IAQCR, Maricopa County - Maricopa IAQCR, Yuma and La Paz counties to Mohave-Yuma IAQCR.

The majority of the Arizona segment of the U.S.- Mexico border area is sparsely settled desert or semi-desert. However, this segment contains two large areas of urbanization, the Phoenix and Tucson metropolitan areas. Several "sister cities" are also located along the U.S.-Mexico border such as Nogales, Sonora and Nogales, Arizona and San Luis Rio Colorado, Sonora and Yuma, Arizona. There are a number of air quality problems related to the rural, urban, and industrial areas within this study area. A number of man-made sources of air contaminants affect the air quality of the study area. These include industrial emissions, mobile (vehicular) emissions, area emissions (e.g., emissions from numerous residences and small commercial establishments in an urban setting), dust resulting from wind erosion of agriculturally disturbed lands, smoke from forestry burns, and pollutants transported into the study area on winds blowing from major urban/industrial areas outside the study area. One of the largest sources of air pollution in Arizona is controlled burning of forest lands.

Airborne particulates are a special problem in the study area counties. Construction activity and windblown dust from disturbed desert are significant sources of fugitive dust. In agricultural areas, farming activity is an additional source of fugitive dust. In rural industrial areas of the state, tailings piles, surface mines, quarries, material handling and storage, ore crushing and grinding, and haul roads are major sources of particulate matter. In Phoenix and Tucson, vehicular traffic on unpaved and paved roads and streets produces large quantities of dust. Smoke from fireplaces and woodstoves also adds to the level of airborne particulates during the cooler months.

In the Phoenix and Tucson metropolitan areas, high levels of automobile emissions, meteorology, and topography combine to produce episodes of carbon monoxide levels exceeding Federal NAAQS. The Phoenix area also experiences episodes of ozone levels above the Federal standard.

During the cooler months, the Phoenix metropolitan area experiences episodes of a fine particulate buildup (winter haze or brown cloud phenomenon). These airborne particulates consist primarily of carbon, nitrates, and sulfates, and are attributed primarily to motor vehicle usage, although wood burning is also known to contribute significantly at times.

A summary of emissions of criteria pollutants in the Arizona study area is as follows: 6,955 tons SO_2, 3,517 tons of TSP, 18,558 tons of NO_2, 3,499 tons CO, and 3,526 tons VOC. Pollutant emissions estimates for industrial sources operating within the Arizona study area that had reported emissions of toxic air pollutants for 1996 totaled nearly two million pounds. They do not include toxic substances emitted from mobile sources or area sources (e.g. open burning). Data from the USEPA indicates that portions of the following

counties within the Arizona study area are in non-attainment of the NAAQS: Cochise - PM_{10} and SO_2; Maricopa - O_3, CO, PM_{10}; Pima - CO, PM_{10}, SO_2; Santa Cruz - PM_{10}; Yuma - PM_{10}.

The USEPA Pollutant Standards Index for the Arizona study area counties indicates that over 86 percent of the days throughout the year were rated as having less than "good" air quality in Maricopa County in 1997. Pima County experienced 44 percent of "moderate" air quality during the same time period. All other counties in the Arizona study area were found to have "good" air quality at least 80 percent of the days in 1997.

There are two mandatory Federal Class I areas within the Arizona study area. These are the Chiricahua National Monument Wilderness, managed by the NPS, and the Chiricahua Wilderness, managed by the USFS. Both are located in east-central Cochise County.

3.4.4 Surface Water Quality

Surface water in the Arizona study area is located in the Lower Colorado Hydrologic Region. The state of Arizona has implemented the watershed management approach for its water resources. The major surface water basins in the study area delineated by the Arizona Department of Environmental Quality (ADEQ) include: the Colorado/Lower Gila, the Santa Cruz/Rio Magdelana/Rio Sonolta, the San Pedro/Wilcox Playa/ Rio Yaqui, and the San Carlos/Safford/Duncan basins. The Wilcox Playa Basin is a topographically closed basin that drains toward the interior. During seasonal flooding, shallow lakes appear that when dry become vast salt playas. The Gila River, San Pedro River, and Santa Cruz River basins ultimately drain into the Southern Colorado River Basin. The Rios de Mexico Basin, consisting of the Yaqui River and the Sonoran Drainage, drain south into Mexico. Irrigation canals (i.e., Wellton, Mohawk, East Main, West Main, and B) have been installed along the Lower Gila and Lower Colorado rivers in Yuma County for agricultural and drinking water supplies. In addition, the Central Arizona Project (CAP) canal diverts waters from the Colorado River for agriculture use in Tucson and onto farms in the Avra Valley, Pima County. There are no reservoirs with a capacity of 5,000 acre-feet that are used for conservation and flood storage in the Arizona study area. Many of the named drainage systems in the study area are intermittent streams and are often dry. The Colorado River and groundwater supply most of the potable water to the study area.

Water quality assessments for the study area indicate that the major causes of stream/riverine non-attainment include heavy metals, ammonia, low dissolved oxygen, turbidity, total dissolved solids, and fecal coliform bacteria. The potential sources contributing to non-attainment of assigned uses in streams and rivers include the following: mining operations, municipal point sources including wastewater effluent, agriculture irrigation and recirculation, range management, and non-point sources.

A source of potential pollution is untreated or partially treated wastewater discharges. Some regions of the border area, namely where waters which cross the border or flow into rivers that form the international boundary between Mexico and the U.S., have unsanitary conditions due to inadequate treatment or collection facilities. Within the study area, the sister cities of Nogales/Nogales and San Luis Rio Colorado/Yuma are considered major contributors of waste discharges into the Santa Cruz River and the Colorado River.

Designated uses include: full body contact, partial body contact, domestic water source, fish consumption, aquatic and wildlife (cold water fishery), aquatic and wildlife (warm water fishery), aquatic and wildlife (ephemeral), aquatic and wildlife (effluent dependent water), agricultural irrigation, and agricultural livestock watering.

3.4.5 Groundwater Quality

In conformance with ADEQ's watershed management approach, groundwater basins in the state of Arizona have been delineated according to hydrological features rather than political boundaries or jurisdictions. In addition, Active Management Areas have been assigned to those groundwater basins where impacts from humans have been most prevalent, i.e. groundwater pumping overdrafts and contamination. Within the Basin and Range Province, alluvial and bedrock aquifers are prevalent; however, the alluvial fill aquifers provide most of the usable groundwater. Alluvial aquifers are confined and unconfined systems consisting of sand, gravel, silt, and clay.

Groundwater basins and sub-basins in the study area include: Cibola Valley sub-basin, Wellton-Mohawk sub-basin, Yuma basin, Avra Valley sub-basin, San Simon Valley sub-basin, Santa Rosa sub-basin, Upper Santa Cruz sub-basin, Wilcox basin, Aguirre Valley sub-basin, Childs Valley sub-basin, San Simon basin, Western Mexico basin, Sierra Vista sub-basin, Cienega basin, Douglas basin, Douglas INA basin, San Bernadino basin, and the San Rafael basin.

Groundwater assessments within the study area indicate that the most common sources for potential contamination include: (1) high nitrate and ammonia levels from sewage treatment plants, individual septic systems, and fertilizer use; (2) microorganisms from septic tanks and raw sewage from Mexico; (3) trace metals (i.e., lead, mercury, barium, copper, zinc, and cadmium) from mining and mineral milling; (4) increased pesticides (e.g., DBCP and EDB), total dissolved solids, and sulfate levels from agricultural irrigation; (5) natural and synthetic organic compounds from commercial and industrial sites; (6) petroleum products and fuel additives (i.e., BTEX, TPHC, lead) from service stations, highway spills, and leaking underground storage tanks (LUSTs); and (7) hazardous wastes from Comprehensive Environmental Response, Compensation, and Liability (CERCLA), Resource Conservation and Recovery Act (RCRA), Water Quality Assurance Revolving Fund (WQARF), and Installation Restoration Program (IRP) sites.

3.4.6 Vegetation Communities

Four vegetation communities defined on the basis of the interaction of geology, soils, physiography, and climate are found within the study area. These include: (1) forest, which is subdivided into petran montane conifer forest and petran subalpine conifer forest; (2) woodland, which includes madrean evergreen woodland; (3) grassland, which is subdivided into semidesert grassland and plains and Great Basin grassland; and (4) desert scrubland, which is subdivided into Sonoran Desert scrub and Chihuahuan Desert scrub.

3.4.7 Threatened/Endangered Species and Critical/Sensitive Habitats

A total of 46 Federally endangered, threatened, and candidate species occur within the study area. Twenty-nine species are listed as endangered, one as proposed endangered, nine as threatened, one as proposed threatened, and six as candidate.

Eight Federal critical habitats have been designated within the study area for the following species: Huachuca water umbel – located near Fort Huachuca Military Reservation in Cochise and Santa Cruz Counties (63 FR 71838); Beautiful shiner, Yaqui catfish, and Yaqui chub – located in San Bernadino National Wildlife Refuge within Cochise County (49 FR 34490); Desert pupfish – located in Quitabaquito Spring within Pima County (51 FR 10842); Razorback sucker – Maricopa County (51 FR 21154 and 59 FR 13374); Sonora chub – located in Sycamore Creek within Santa Cruz County (51 FR 16042); Southwestern willow flycatcher – located in the San Pedro River in Cochise County. Critical habitat has also been proposed for the cactus ferruginous pygmy-owl near the Buenos Aires National Wildlife Refuge in Pima

County (50 FR 71820). A variety of Federal sensitive habitats occur in the study area and include the following: habitats for the 46 Federally listed species mentioned above; 13 designated Wilderness Study Areas; six designated Research Natural Areas with eight more proposed; and 37 proposed Areas of Critical Environmental Concern.

3.4.8 Unique or Sensitive Areas

A wide variety of unique or sensitive areas exist within the study area. These include Wilcox Playa in Cochise County; springs along the San Pedro, Santa Cruz, Gila, and Lower Colorado Rivers; Quitobaquito Spring in Pima County and Monkey Spring in Santa Cruz County; Cienegas in Cochise and Santa Cruz Counties; Grand Desierto area; Tinajas Altas area; Southwestern willow flycatcher and Yuma clapper rail habitat along the Colorado River; arroyos and associated riparian communities through the Basin and Range Province; sand dunes at the Cactus Plain Natural Area; the Pinacate Lava Flow in Yuma County; and Kartchner Caverns State Park in Cochise County.

No wild and scenic rivers, as designated by the USDI (1998), occur within the study area. However, 37 stream segments within the study area are protected by various state agencies.

Wetland types within the study area include riverine and riparian ecosystems, playa lakes, desert springs, and cienegas. According to Region 2 of the USFWS, four priority wetlands that qualify for acquisition under the Emergency Wetland Resources Act of 1986 are located within the study area. In addition, the BLM has designated the San Pedro River, from the U.S./Mexico border north to Benson, a Riparian National Conservation Area, to be managed in a manner that conserves, protects, and enhances paleontological, scientific, cultural, educational, and recreational resources of the conservation area.

3.4.9 Hazardous Waste

A total of 837 sites were identified in the Arizona study area: 57 CERCLA sites, 8 RCRA violation and corrective action sites, and 772 LUST sites. Counties or areas that are predominantly rural with historically low industrial activity and small populations have a low number of reported sites. The USEPA (1998) Toxic Release Inventory (TRI) System reported that releases in 1996 from various sources were highest in Maricopa County, representing about 88 percent of all the toxic emissions reported from the 6-county area. The majority of these emissions were released from industrial air stacks. A total of approximately two million pounds of toxic emissions to air, water, and land were reported for the Arizona study area counties.

The transboundary movement of hazardous materials/wastes and abandoned or illegal hazardous waste sites is a potential source of pollution occurring in some regions of the border area. Within the study area, the sister cities of Nogales/Nogales are considered a high priority city-pair where the transportation, handling, and disposal of hazardous wastes are a cause of public concern.

3.4.10 Socioeconomics

The counties included in the socioeconomic baseline data are Cochise, Santa Cruz, Pima, and Yuma. The 1997 total population for the four-county area was 1,060,284 with 74 percent located in Pima County. Of the Pima County total, 449,002 persons are estimated in 1996 to be in the city of Tucson. In general, the area is very rural. Most of the land is owned by the Federal government or Tribal Governments and managed by various agencies (e.g., DoD, USFWS, NPS, BLM), and Native American Nations. These areas are unlikely to be affected by INS or JTF-6 actions. However populated areas may potentially be affected by INS or JTF-6 activities (Tucson and other smaller cities). Non-Hispanic whites comprise the largest

portion of the population, followed by Hispanics, African-Americans, then Native Americans. The distribution of housing units follows that of population with most units located in Pima County.

The economic structure of the study area varies between the urban and rural areas. The leading employment and income sectors include government, services, and retail trade.

3.4.11 Cultural Resources

The majority of the archeological sites across southern Arizona have been found near or along the many intermittent drainages that flow southward across the U.S./Mexico border. In southeastern Arizona, significant Paleo-Indian sites, such as Lehner, Murray Springs, Double Adobe, and Naco have been documented along the drainage systems of the Sulphur Springs and San Pedro rivers (Martin and Plog 1973). In south-central and far southwestern Arizona, the highest concentrations of archeological sites are found along the Santa Cruz, Lower Colorado, and Gila rivers.

Based on the recent results of the Douglas-Naco sector survey in southeastern Arizona, the majority of the sites along the study corridor have been located on terraces and ridges flanking drainages and small washes (Martynec and Peter 1992). Some sites also have been found within the floodplains of some drainages. From the recent results of the Tohono O'odham survey in south-central Arizona, half of the sites along the study corridor have been located on terraces and ridges near drainages (Martynec et al. 1992). The remaining sites were found on flats or on upland bajadas. A similar pattern of site distribution is expected to apply along the study corridor in far southwestern Arizona, especially between the dune fields east of Yuma and the Tinajas Altas Mountains where there are numerous small, southern-flowing drainages.

Historic properties in southern Arizona vary greatly in size and configuration. Over 2,000 sites have been recorded within the study corridor. The present inventory of sites, however, merely reflects the survey of a very limited portion of Cochise, Pima, and Yuma counties. The present index of properties listed in the National Register of Historic Places also represents a small proportion of those sites that might be potentially eligible for the National Register within the study corridor. At the present, this listing is quite biased toward historic mining communities, industrial complexes, and ranches. Only a few of the significant prehistoric properties within southern Arizona are so listed.

Three basic types of archeological sites may be expected to be encountered along the study corridor in southern Arizona. They are: (1) lithic scatters (likely predominantly prehistoric), (2) limited activity sites (prehistoric and historic), and (3) habitation sites (prehistoric and historic) (Martynec and Peter 1992; Martynec et al. 1992). These sites can range from thin surface scatters to extensive deposits of cultural material with intact middens and features. Rockshelters, petroglyphs, boulder pictographs, intaglios, shrines, and trails may be encountered along the SPEIS study corridor as well.

Lithic scatters are found near exposed rock outcrops and usually consist of a thin scatter of chipped stone debris including primary and secondary flakes, core and core fragments, and a few tools. Sites of this type reflect specific activities involving the manufacture of lithic tools, and as a rule, usually do not contain other kinds of artifacts or features.

Prehistoric limited activity sites consist of thin artifact scatters and/or cultural deposits that contain a variety of tools (aside from lithic debris) representing more than one kind of activity. These sites typically represent activities involved with the acquisition of food, such as hunting and/or butchering and plant processing. Historic limited activity sites consist of features and/or concentrations of artifacts, such as dams, saguaro fruit camps, trash dumps, mining enterprises, and ranch-related features such as dipping tanks and corrals.

Prehistoric habitation sites represent extensive and dense concentrations of artifacts and, as a rule, contain many features. Such sites represent habitation areas that were occupied permanently or revisited on a seasonal basis. Midden deposits, burials, faunal and macrobotanical remains, and structural features regularly occur on these sites in association with a wide array of artifacts, including chipped and ground stone, worked shell and bone, and large quantities of ceramics. Historic habitation sites represent homesteads that usually contain above-ground structures associated with a scatter of artifacts.

3.5 CALIFORNIA LAND BORDER (VOLUME 5)

3.5.4 Geological Resources

The project study area along the California Land Border occurs within two physiographic provinces: the Southern California Desert and the Peninsular Ranges of the Transverse and Peninsular Ranges. The Southern California Desert is a low elevation desert characterized by flat land and low hills. The Peninsular Range is a northwest-southeast block-faulted mountain range separated by long narrow valleys.

Surface geology of the study area is dominated by Quaternary-aged river deposited alluvium to the east, and Mesozoic-aged igneous intruded rocks to the west. An abundance of northwest-southeast oriented fault systems also occur in the area.

The Southern California Desert portion of the study area contains limited amounts of mineral resources; whereas mining for both industrial minerals and metals has occurred in the Peninsular Ranges. Mining activities have the potential to impact the local environmental quality, with surface water and groundwater at particular risk.

3.5.5 Soils

Limited soils data exist for the Southern California Desert Province. To date, only the Imperial Valley and areas adjacent to the Anza-Borrego Desert State Park have been mapped. The majority of the Peninsular Ranges has been mapped with the soils divided into groups based on topography. Because of the arid conditions the majority of the soils present exhibit high levels of erodability. Conversely, limitations to construction are generally low due to the small amount of clay material within the soil profile.

3.5.6 Air Quality

The State of California air quality standards differ from the National Ambient Air Quality Standards. California has adopted more stringent standards for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulate matter, and lead.

Imperial County is assigned to the USEPA Southeast Desert Air Quality Control Region (AQCR) and is in the Salton Sea Air Basin state AQCR. San Diego County is the USEPA San Diego Air Quality Control Region in its entirety. The San Diego County Air Pollution Control District is the local agency responsible for air quality management matters (e.g., permitting) in San Diego County. The California Air Resources Board (CARB) is the state-level agency responsible for administration of state and Federal air quality regulations.

Imperial County along the California border encompasses an area that is predominantly sparsely populated desert. Wind-blown dust and pollutants are occasionally transported into the airshed from neighboring urban/industrial areas. There are relatively few man-made sources of air pollutants within Imperial County

and the quantities of man-made pollutants generated are low. No sources were reported for sulfur dioxide (SO_2), carbon monoxide (CO), volatile organic carbons (VOC), and lead. A total of 941 tons of NO_2 were reported for 1997, while 1,148 tons were reported for total suspended particulates. Imperial County is in non-attainment of the NAAQS and state standards for ozone and a portion of the county (Imperial Valley Planning Area) is in non-attainment for particulate matter (PM_{10}). Under the state standards, the City of Calexico is in non-attainment for carbon monoxide. All other areas are either in attainment or are currently unclassified.

Pollutant emissions estimates for 1997 from industrial point sources for San Diego County were 1,447 tons of SO_2; 2,155 tons of TSP; 4,064 tons of NO_2; and 3,093 tons of VOC. Lead and CO were not reported. Non-point source and mobile source emissions are regarded as the main source of air quality degradation in Southern California, particularly CO. San Diego County is designated non-attainment of the NAAQS for ozone, with a classification of "severe" and the western part of the county is designated non-attainment for carbon monoxide. San Diego County is in non-attainment of the state standards with regard to ozone and PM_{10}. As a result of the ozone and carbon monoxide pollution problems in the urban area of the county, there is a substantial network of ambient air monitoring collecting data on levels of ozone, sulfur dioxide, lead, nitrogen dioxide, particulate, and carbon monoxide in the San Diego metropolitan area.

The USEPA's Toxic Release Inventory (TRI) for Imperial County indicated permitted facilities reported 99,976 pounds of fugitive and 291,066 pounds of stack-released emissions for a total of 391,042 pounds of toxic air emissions in 1996. The TRI for San Diego County indicated permitted facilities reported 402,010 pounds of fugitive and 293,252 pounds of stack-released emissions for a total of 695,262 pounds of toxic air emissions in 1996.

Numerous maquiladoras (manufacturing plants) operate in Mexicali, Mexico. Emissions from the maquiladoras along the U.S./Mexico border are a concern, particularly regarding VOC emissions from plants that manufacture electronic and electric equipment, material and supplies, transportation equipment, and furniture. Additionally, several other industries located in Mexico near the international border release significant amounts of air pollutants. These industries include: oil and gas production, metallurgy, iron and steel, electric power generation, cement manufacturing, and brick manufacturing. Many residences in the Mexican border area burn nontraditional fuels such as wood scraps, cardboard, and tires to provide warmth in the winter. The resulting particulate loading adversely affects air quality in the California border counties. Transport of air pollutants into Imperial County from the urban/industrial sources of the San Diego/Tijuana and Yuma/San Luis Rio Colorado "sister cities" areas also occurs under certain meteorological conditions.

In 1997, Imperial County was reported to have less than "good" air quality 78 percent of the days that year. Over a month of "unhealthful" air quality days were reported during this time period. The pollutant standards index data for San Diego County indicates that in 1997, only 37 percent of the days had "good" air quality.

There are no mandatory Federal Class I areas within Imperial County. One mandatory Federal Class I area, the Aqua Tibia Wilderness, is located north of the study area in San Diego County.

3.5.7 Surface Water Quality

The Southern California Desert of the California study area is located within the Colorado River Basin as recognized by the State Water Resources Control Board (SWRCB). This region is divided into seven major planning areas on the basis of economic as well as hydrologic characteristics. Portions of three of these planning areas are within the Southern California Desert study area: the East Colorado River Basin, the Imperial Valley, and the Anza-Borrego planning areas. Surface water in the Peninsular Range

Physiographic Province of the California land border study area occurs within the San Diego and Lower Colorado River Regional Water Quality Control Board jurisdictions.

These jurisdictions, which have been delineated for planning purposes, are further divided into major hydrologic units, hydrologic areas, and hydrologic subareas. Additionally, the California land border study area is occupied by cataloged U.S. Geological Survey (USGS) watersheds that generally coincide with one or several of the major hydrologic units in the region. The term "beneficial uses" is defined in the California Water Code as the uses of water necessary for the survival or well being of man, plants, and wildlife that serve to promote tangible and intangible economic, social, and environmental goals. The term "Beneficial Uses" is equivalent to the term "Designated Uses" under Federal law.

Major surveillance, monitoring, and assessment programs undertaken by the SWRCB include: Toxic Substance Monitoring, State Mussel Watch, Bay Protection and Toxic Cleanup, Compliance Monitoring and Inspections, Complaint Investigations, specially commissioned Intensive Surveys, Municipal Storm Water Monitoring, the Biennial Water Quality Inventory/Water Quality Assessment Report, the Clean Water Strategy, and overall Quality Assurance and Quality Control. Upon adoption by the SWRCB of the statewide California Water Quality Assessment Report based on submittals from all regional boards, it is submitted to the USEPA in conformance with Section 305(b) of the Federal Clean Water Act.

Water quality assessments for the San Diego Region indicated that the major causes of stream/riverine and reservoir/lake non-attainment include fecal coliform bacteria, pesticides, nutrients, and metals. The potential sources of non-attainment include municipal, industrial, and agricultural storm runoff. Another source of potential pollution is untreated or partially treated wastewater discharges. Some regions of the border area, namely where waters which cross the border or flow into rivers that form the international boundary between Mexico and the U.S., have unsanitary conditions due to inadequate treatment or collection facilities. Within the study area, the sister cities of Tijuana/San Diego are considered as major contributors of waste discharges into the Tijuana River and Estuary as well as San Diego Bay and the Pacific Ocean. This situation has been greatly mitigated by the construction of the South Bay International Wastewater Treatment Plant and South Bay Ocean Outfall in south San Diego County.

The San Diego Region is highly dependent upon imported water supplies provided by the Colorado River and the California State Water Project (SWP). Approximately 90 percent of the water demand in the San Diego Region is supplied by imported water. Surface runoff and local groundwater supplies the remaining 10 percent of the water demand in the San Diego Region.

3.5.8 Groundwater Quality

Within the Southern California Desert segment of the study area, the Basin-Fill aquifer system underlies much of the desert of southeastern California. It is an unconfined/confined alluvium aquifer consisting of interbedded lacustrine deposits of sand, gravel, silt, and clay. Groundwater is the significant source of water supply in the Colorado River Basin Region. The SWRCB has established water quality objectives for each hydrologic unit. Groundwater pumped in the Colorado River Basin Region generally returns to the basin with an increase in mineral concentrations. Within the Peninsular Ranges segment of the study area, the Basin-Fill aquifer is located in the desert areas in the eastern and northeastern portions of San Diego County, while the alluvium and older sediments aquifer predominately underlies the San Diego area and areas northeast of San Diego. The Basin-Fill aquifer system is an unconfined/confined alluvium aquifer consisting of interbedded lacustrine deposits of sand, gravel, silt, and clay. In many parts of the San Diego Region, usable groundwater occurs outside the principle water-bearing geologic formations and not within strata that meet the definition of an aquifer. The term "groundwater" for basin planning and regulatory purposes includes all subsurface waters whether or not they are found within an aquifer or identified groundwater basin.

Groundwater is a significant source of the available water supply in the San Diego Region. The SWRCB has established water quality objectives for each hydrologic unit. Water constituents for which numerical objectives have been listed include total dissolved solids (TDS), chlorides, sulfate, sodium, nitrate, iron, manganese, methylene blue - activated substances (MBAS), boron, odor, turbidity, coloration, and fluoride. Water quality criteria are established to protect specific beneficial uses of waters. In some basins of the San Diego Region, beneficial use of groundwater is marginal or nonexistent. In some of these areas, beneficial uses have been deleted to promote wastewater reclamation by sewage treatment plants based upon a determination that the loss of groundwater supplies were outweighed by the long-term increase in wastewater reclamation. For purposes of intrusion, barrier formation, or groundwater recharge, discharge of reclaimed water in areas of equal or poorer water quality is allowed contingent upon approval by the Regional Boards.

Groundwater assessments for the study area within the Colorado River Basin Region hydrologic units indicate several sources for potential contamination. The most common of these sources include irrigation return flow resulting in increased mineral concentrations (i.e., total dissolved solids, nitrate, etc.) as indicated in the Borrego, Terwilliger, and Ocotillo subunits of the Anza-Borrego Hydrologic Unit. Other sources involve application of agricultural pesticides (i.e., DBCP, EDB) and fertilizers, improper waste disposal and industrial practices (e.g., leaking underground storage tanks, landfill sites) as well as land subsidence. Another contributing factor is geothermal resources resulting in increased dissolved solids containing marginally hazardous levels of arsenic, lead, and zinc and a large amount of other potential pollutants (i.e., copper, strontium) as well as land subsidence. Extensive geothermal resources have been identified in several areas of the Imperial Valley: power plants - Salton Sea, Heber, and East Mesa KGRA; and drilling areas - cities of Brawley, Westmoreland, and Salton. Other potential sources of pollution are untreated or partially untreated wastewater and industrial wastes which may pose a risk to transboundary groundwater. Some regions of the border area, namely where waters which cross the border or flow into rivers that form the international boundary between Mexico and the U.S., have inadequate management and treatment facilities for wastewater and industrial/hazardous wastes. Within the study area, the sister city of Mexicali/Calexico is considered as a major contributor of waste discharges into the New River. The groundwater throughout the Imperial Planning Subarea is in chronic overdraft and no safe yield is given under any conditions.

Groundwater assessments within the San Diego Region hydrologic units indicate that the most common sources for potential contamination include: (1) current groundwater withdrawals, particularly for municipal and manufacturing purposes, and a corresponding decline in artesian pressure which has caused land surface subsidence, saline water encroachment, surface fault activation, and serious water level decline; (2) organics and metals from LUSTs; and (3) high levels of LUST, TDS and chlorine from seawater encroachment, urban runoff, and natural sources. Another potential source of pollution is untreated or partially untreated wastewater and industrial wastes which may pose a risk to transboundary groundwater. Some regions of the border area, namely where waters which cross the border or flow into rivers that form the international boundary between Mexico and the U.S., have inadequate management and treatment facilities for wastewater and industrial/hazardous wastes. Within the study area, the sister cities of Tijuana/San Diego are considered as major contributors of waste discharges into the Tijuana River and Estuary as well as San Diego Bay and the Pacific Ocean. The "safe yield" of groundwater in the San Diego Region is 28,000 acre-feet. Up to 13,000 acre-feet of groundwater may be reclaimed for reuse during drought conditions. The state water budget does not allow for "overdraft" of groundwater.

3.5.9 Vegetation Communities

Seven vegetation communities exist within the study area. These include: (1) shrub formations, which are subdivided into chaparral and coastal sagebrush; (2) scrub formations, which are subdivided into Sonoran creosotebush, alkali scrub-woodland, salton sea saltbush, cactus scrub, and oasis scrub-woodland; (3)

deserts, which include hot sandy deserts; (4) needle-leaved evergreen forest formations, which are subdivided into juniper-pinyon woodland, mixed hardwood forest, and southern jeffery pine forest; (5) broad-leaved forest formations, which include southern oak forest; (6) graminoid formations, which include California prairie and coastal saltmarsh; and (7) formations of coastal complexes, which include southern seashore communities.

In addition to vegetation communities, numerous types of invertebrates and non-vascular plants form an extensive biotic community within the various shoreline habitats along the study area of Southern California. The shoreline consists of the following types of shore communities: (1) coastal sand dunes, (2) beaches, and (3) intertidal areas.

3.5.10 Threatened/Endangered Species and Critical/Sensitive Habitats

A total of 80 Federally listed species occur within the study area. Of these, 52 species are listed as endangered, 14 proposed endangered, eight as threatened, and six as proposed threatened. The State of California lists 36 endangered species, 10 threatened species, and eight rare species within the study area.

Three Federally designated critical habitats occur within the study area for the following species: Desert pupfish – located in portions of San Felipe Creek, Carrizo Wash, and Fish Creek within Imperial County (51 FR 10842); Desert tortoise – located in the Chuckwalla unit within Imperial County (50 FR 5820); Razorback sucker – located along the Colorado River, and corresponding 100-year floodplain from Parker Dam to Imperial Dam in Southern California (50 FR 13374). A variety of Federal sensitive habitats occurs in the study area and includes the following: the Tijuana River and Salton Sea National Wildlife Refuges; the Tijuana River Valley; the All-American Canal Area; five existing or proposed Areas of Critical Environmental Concern; and one Habitat Management Area.

3.5.11 Unique or Sensitive Areas

A wide variety of unique or sensitive areas exists within the study area. These include the Salton Sea, Tijuana River Estuary, coastal beaches and sand dunes, vernal pools, palm oases, arroyos, springs, and wetlands.

There are numerous acres of protected water bodies within the state; however, there are no nationally designated wild and scenic rivers within the study area (UDSI 1998).

Wetland types within the study area include riparian systems, saltwater/freshwater marshes, vernal pools, and freshwater springs/seeps. Approximately 39,209 acres of wetlands exist within the Southern California Desert portion of the study area, with the majority (20,012 acres) associated with the East Highline Canal. The western portion of the study area (San Diego County) contains approximately 18,511 acres, with the majority (12,315 acres) associated with San Diego Bay.

3.5.12 Socioeconomic Resources

This discussion is further subdivided into two subsections due to the quite different socioeconomic characteristics of the western and eastern California border regions. These discussions are separated under the same physiographic provinces described in the Environmental Baseline Documents (INS/JTF-6 1999).

3.5.12.1 Southern California Desert Province

The baseline socioeconomic data for the California land border involves Imperial County. The 1997 population estimate for this county was 143,706, which has increased from 109,000 in 1990. Approximately 66 percent of the population is Hispanic, followed by 29 percent non-Hispanic whites, and other races comprising five percent. There are 36,559 housing units and the vacancy rate is 10.2 percent. The latest information available was from 1990.

Employment in Imperial County totaled 41,800 in 1997, with an unemployment rate of 26.5 percent. Agricultural services account for 16 percent of the total jobs in Imperial County. This is significantly higher than the national average of less than four percent. Government and retail trade are also important economic sectors.

3.5.12.2 Peninsular Range Province

The baseline socioeconomic data for this province involves San Diego County. Its total population was 2.7 million in 1997, an increase of nine percent from 2.5 million in 1990. The county is heavily populated, with a density of 647 persons per square mile. Approximately 65 percent of the total population is non-Hispanic whites, followed by 25 percent Hispanics and 14 percent other races. Although San Diego is the largest city within the county, there are three others with a population exceeding 100,000.

In 1990 San Diego County contained 946,799 housing units. The median housing value for the county was $186,700 and for rental rates was $564, both values being significantly higher than Imperial County.

The leading employment and income sectors include services, government, retail trade, and manufacturing. Other sectors important to employment were construction, finance, insurance, and real estate.

3.5.13 Cultural Resources

This discussion is further subdivided into two subsections: the Colorado River Region and the Peninsular Range Region.

3.5.13.1 Colorado River Region

As a rule, the more recent sites in the Colorado River subregion are found near modern water sources, while earlier sites are found at higher elevations along mountain slopes, on old terraces overlooking ancient watercourses, or along extinct river channels (Campbell 1936; Eighmey 1990; Moratto 1984). In the Colorado and southern Mojave Deserts, many sites frequently are found along the formerly fluctuating shoreline of Lake Cahuilla and within the Lower Colorado River Valley. Eighmey (1990) and others have made the important observation that the development and successional patterns of the Salton Basin ecosystem and its prehistoric cultures are intricately tied to the cycles of Lake Cahuilla and the Colorado (Moratto et al. 1978; Byrne 1979). The fluctuations of Lake Cahuilla are important when considering early settlement patterns, as the processes buried many earlier surfaces (Von Werlhof 1980).

The vast majority of prehistoric archeological sites in the Colorado River subregion consist of either surface scatters or as thin subsurface deposits that rarely reveal any discrete temporal separation of occupations. A few stratified sites have been located on terraces of the Lower Colorado River (Schroeder 1961) and within rockshelters situated in the eastern slopes of the Peninsular Ranges (Wallace et al. 1962). Sites in the desert areas usually are composed of one or more loci containing general activity areas, middens, chipping stations, cremations, food processing areas, caches, pottery concentrations, or hearths.

As many as 30 "geoglyphs," also referred to as "intaglios," are also found in flat areas of the desert (U.S. Army 1994). These features consist of giant, scraped earth drawings, representative of anthropomorphic and zoomorphic figures, as well as other kinds of geometric designs. As in other regions of North America, the function of these sites is unknown; however, it is conceivable that they were used for spiritual purposes. The features can be quite large and some are more than 20 m in length.

Listed NRHP sites for Imperial County include segments of the De Anza Trail, a post office, Desert View Tower, the Yuma Crossing and associated sites, and others. The Mission Puerto de la Purisima Conception established by the Spanish near Yuma later became the site of Fort Yuma in 1851 to protect the southern emigrant trail and to control the warlike Yuma in the area (Frazer 1965). In addition to those sites listed on the NRHP, the variety of historic sites that may be anticipated in the study area are those related to settlement, the mining and ranching industries, and transportation.

3.5.13.2Peninsular Range Region

The most comprehensive site-locational data for the San Diego subregion were derived by Christenson (1990). Based on a systematic, random sample of 741 sites, Christenson concluded that 42 percent of the sites were located in the foothill zone, 34.5 percent in the mountain zone, and the remaining 23.5 percent along the coastal strip. About 74.4 percent of the 741 sites were located along seasonal streams, 10 percent along permanent streams, and 10 percent near presently active springs. These data are complicated by various differences between past and present water courses where the agents of overgrazing, wildfires, erosion, and drought have brought observable hydrologic changes to the modern landscape (Christenson 1990). Other locational correlations may be similarly complicated by the issues of where the greatest number of cultural resource surveys have been conducted and other sampling biases.

Prehistoric archeological sites of the San Diego subregion have been divided into five functional categories (Christenson 1990): (1) large and small processing sites, (2) large and small habitation sites, (3) lithic scatters, (4) quarry sites, and (5) rock alignments. The majority of prehistoric sites in the San Diego subregion consist of large and small processing sites (Christenson 1990). Small processing sites are the most numerous. These sites appear to have been oriented toward a specific kind of economic activity, such as hunting or the processing of plant foods, but middens are not present.

The next most frequent site type found in the San Diego subregion consists of large and small habitation sites (Christenson 1990). Habitation sites are multi-activity sites that have midden deposits, hearth features, and diverse artifact assemblages, often including ceramics. Human remains (predominantly cremations) are often found on these sites as well. Shell middens along the coastal zones often are associated with habitation sites (Moratto 1984). Habitation sites usually have dense concentrations of artifacts and features spread over a wide area and can include rockshelters, rock enclosures, and/or rock alignments (Christenson 1990).

Lithic scatters are the next most frequent site type found in the San Diego subregion. As a site type, lithic scatters are fairly self evident, consisting of a thin surface veneer of chipped stone debris. These are distinguished from processing sites by an absence of milling-related features. Most lithic scatters probably functioned as loci for refurbishing artifacts and, like processing stations, were not located adjacent to a particular water source. The distance to a water source from a lithic scatter averages 560 feet and over 50 percent of these sites were documented on top of small ridges, terraces, and mesas (Christenson 1990).

Quarry sites within the San Diego subregion tend to be quite large with an average size exceeding half an acre. Quarry sites usually are found at higher elevations and are always situated on or near a lithic outcrop or vein. Commonly they are found along a quartz vein, a dike, or near a particular metavolcanic outcrop.

Artifacts associated with quarry sites include a large number of primary flakes, some blanks, and preforms (Christenson 1990).

Rock alignments consisting of rings and linear forms are the other site type found within the San Diego subregion. These sites typically are found in high places such as ridge tops, prominences within valleys, and above drainage heads, and range in size from a meter to more than 500 feet in length. Rock alignments in the San Diego subregion occur in granitic areas and, on average, are more than 1,300 feet away from a water source (Christenson 1990). The function of rock alignments remains enigmatic; however, they may have been used for ceremonial purposes, as territorial markers, or as granary foundations for the storage of acorns (Heizer and Elsasser 1980).

Listed NRHP sites within San Diego County include Fort Stockton, or Fort Du Pont (1838), the Presidio of San Diego (1769) and Castillo Guijarros (1795-1838) established to protect San Diego Bay. The Castillo later became Fort Rosecrans (1852) a U.S. military reservation and fortified earthworks (1873) (Frazer 1965). Additional listed sites include hotels and the Gas Lamp Historic District. In addition to those sites listed on the National Register, the variety of historic sites that may be anticipated in the study area are those related to settlement, the mining and ranching industries, and transportation.

SECTION 4.0
ENVIRONMENTAL CONSEQUENCES

4.0 ENVIRONMENTAL CONSEQUENCES

This chapter of the SPEIS addresses the types of impacts that are expected to occur as a result of implementation of the four alternatives. Where possible, the magnitude of the anticipated effects is discussed. It should be emphasized again, however, that due to the programmatic nature of this document, specific identification of the location, timing, and/or quantification of the impacts is impracticable. Such specificity will be provided in each subsequent NEPA document that is tiered to this SPEIS, as the specific projects are identified and planned. The following discussions are grouped according to the resources category and generally follow the same sequential order as the resource discussions presented in Chapter 3 of the SPEIS.

4.1 SOILS

4.1.1 Alternative 1. Full JTF-6 Support to INS, including the ISIS Program

Implementation of this alternative would require about 6,900 acres of soils to be disturbed, primarily from the construction of fences and construction or upgrade of roads. Roads will account for 5,912 acres of soil to be disturbed, assuming an average width of the roads to be 25 feet. It should be noted, however, that the vast majority of these roads are existing roads and would require only upgrade activities, rather than new construction. Therefore, these soils have been previously disturbed.

On the other hand, road repair activities have resulted in reduction of soil erosion in many areas. Roads that are considered impassable due to severe erosion are typically the ones that USBP requests to be upgraded. Repair/upgrade activities contain specific design measures to control erosion. Additional or modified compaction techniques and erosion control measures such as waterbars, gabions, straw bales and re-seeding are implemented to alleviate these situations.

The impacts to soils resulting from the footprint of typical USBP/JTF-6 roads and fences are presented in Table 4-1. The anticipated impacts to soils from other proposed structures are presented in Table 4-2. Obviously, the major engineering construction activities (e.g., roads, USBP stations, etc.) would produce the greatest impacts to soils. Construction of POEs, USBP stations, and other similar facilities would most likely require that the site be paved. Thus, these soils would be essentially removed from biological production.

Soils along the border are typically very sandy and highly erodible. Any construction activity conducted by JTF-6 for INS must evaluate the erosion potential of the project area soils and incorporate erosion control designs into the construction plan. A Stormwater Pollution Prevention Plan (SWPPP) would be required for all construction sites greater than five acres. Beginning in 2003, under Phase II of the National Pollutant Discharge Elimination System (NPDES) Storm Water Program, small construction activities disturbing one acre or greater will also require a SWPPP. Prime and unique farmlands, as defined by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), are rare along the border, with the exception of south and southwest Texas (U.S. Army 1994). To date, no such lands have been removed from agricultural production by INS or JTF-6 actions; future projects would continue to make all practical attempts to avoid alterations to prime and unique farmlands.

Table 4-1 – Anticipated Soil Impacts from Major Engineering Projects

Project Type	Size (feet) Width	Length	Total Acres
Roads	25	1,951	5,912
Drag Roads	25	165	500
Primary Fence	10	180	218
Secondary Fence	10	37	45
Vehicle Barriers	10	111	135
TOTAL		2,444	6,810

Table 4-2 – Anticipated Soil Impacts from Other Proposed Structures

Project Type	Size (feet) Width	Length	Number Planned	Total Acres
Lights	20	20	4,677	43
ISIS Components	20	20	1000	6
Repeater Sites	100	100	11	3
Boat Ramps	200	200	7	7
TOTAL				59

Operational support services provided by JTF-6 produce little, if any, impacts to soils. The only activities within this support category that require ground disturbances are establishment of permanent LP/OPs, placement and removal of ground sensors, and vehicular traffic associated with bivouac and command centers during ground operations. Beginning in 2003, under Phase II of the National Pollutant Discharge Elimination System (NPDES) Storm Water Program, small construction activities disturbing one acre or greater will also require a SWPPP.

General support services do not affect soils since they are typically administrative type activities that are performed indoors or do not involve ground disturbing operations.

4.1.2 Alternative 2. Full JTF-6 Support Without Implementation of ISIS Program

Elimination of additional INS ISIS capabilities would very slightly reduce the potential direct impacts to soils along the border. If the additional lights, RVS, and camera systems are not installed, the amount of soil impacted would only be reduced by about 60 acres or about one percent of the total acres affected under Alternative 1. In order to compensate for the loss of the ISIS detection capabilities, USBP agents would have to increase their patrolling efforts and/or increase the number of patrol agents. The increased use of patrol and drag roads would increase erosion rates along these roads.

4.1.3 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

Alternative 3 would eliminate the INS engineering and general support projects; however, JTF-6 would still provide operational support to INS. The INS ISIS program would also be implemented under this alternative. This alternative would significantly reduce the direct impacts to soils within the study area.

Certain operational support activities, such as ground patrols, LP/OPs, and installation of ground sensors, would cause direct impacts to soils; however, based on previous similar actions, the amount of soils disturbed over the next five years would be less than 20 acres. Installation of the ISIS components would be performed by INS contractors or entities other than JTF-6 and would result in less than 60 acres of disturbed soils.

Conversely, indirect impacts caused by the lack of erosion control measures would continue. USBP would continue to use patrol and drag roads until they become impassable. The rate at which erosion would continue would probably increase until a harder substrate (e.g., caliche) is reached or stabilization occurs due to minor topographical changes. Over time, these indirect impacts could outweigh the direct impacts caused by the engineering actions, although they are currently not quantifiable. Without engineering activities, negative impacts to USBP's mission would be substantial.

4.1.4 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Implementation of this alternative would reduce the amount of soil disturbance by about 20 acres over the 5-year period. This figure is based on previous similar operational actions that have occurred since 1990 (U.S. Army 1994). It should be emphasized that no ground disturbing operational support activities (i.e., terrain denial, LP/OPs, ground patrols) have been conducted by JTF-6 in the last four years.

4.1.5 Alternative 5. No Action

Implementation of the No Action alternative would eliminate direct disturbances to soils from construction and operational activities. However, extant erosion problems would continue without INS/JTF-6 road improvement projects, since the USBP would continue to use these roads until they become impassable. The erosional rate would probably increase without abatement measures as well. Without engineering activities and implementation of the ISIS program, impacts to USBP's mission would be substantial.

4.2 WATER RESOURCES

Water resources within the area encompassed by the SPEIS and proposed actions are limited and concerns regarding adequate supplies and quality are increasing. For example, the San Diego Region is highly dependent upon imported water supplies provided by the Colorado River and the California State Water Project (SWP). Approximately 90 percent of the water demand in the San Diego Region is supplied by imported water (i.e. water supplies that are outside of the local region). Surface runoff and local groundwater supplies the remaining 10 percent of the water demand in the San Diego Region. Water quality assessments for the San Diego Region indicated that the major causes of stream/riverine and reservoir/lake non-attainment included fecal coliform bacteria, pesticides, nutrients, and metals. The potential sources of non-attainment include municipal, industrial, and agricultural storm runoff. Other sources of potential pollution include untreated or partially treated wastewater discharges. Some regions of the border area, particularly transboundary basins, have unsanitary conditions due to inadequate treatment or collection facilities. Future JTF-6 support actions for INS would be required to comply with Federal and state permitting procedures regarding water quality and discharges (See Table 2-5).

4.2.1 Alternative 1. Full JTF-6 Support to INS, including the ISIS Program

The deployment of personnel for construction, maintenance, or patrol operations within the SPEIS study area would result in increased use of the limited water resources in some regions. Most of the proposed

actions are anticipated to be relatively short in duration and therefore are not expected to contribute long-term impacts. The significance and extent of impacts to water resources would be evaluated on a project and site-specific basis. In some cases, coordination with state and local agencies as well as conformance with Federal regulations regarding surface water impacts will be required. Notification and permitting procedures for specific proposed actions and projects would be evaluated for each site-specific project proposed prior to commencement of activities. Personnel would be apprised of applicable water conserving practices and equipment would be maintained and configured for best efficiency in water resources-limited areas. Best management practices for preventing contamination from stormwater runoff would be specified in mitigation plans and implemented. No release of hazardous substances or any other type of contaminated material to any ground surface or water drainage will be allowed. Accidental spills or leaks of hazardous or contaminating substances would be adequately controlled and contained to avoid potential impacts to water resources.

Since Alternative 1 has more ground-disturbing projects associated with it than the other alternatives, it follows that this alternative would have the greatest potential to directly affect water resources. Direct effects would include increased demand on potable as well as non-potable supplies and alterations of waterbottoms (for boat ramps) and wetlands. Impacts to waterbodies from stormwater run-off or accidental spills during construction operations would be one of the more significant indirect effects. The magnitude of these effects would depend upon the size, type and duration of the construction project, timing, weather conditions, vegetative cover and soil type. Employment of a SWPPP and other erosion control measures, as described above and in Chapter 5, would significantly reduce the potential of adverse impacts to water resources through erosion and sedimentation.

Operational support activities can require up to 25 gallons per day per person. The largest such activity (terrain denial exercise) would typically involve 400 to 500 military personnel and would last for about 30 days. Under this scenario, 375,000 gallons of water would be used during the entire project. For comparison purposes, the City of Las Cruces, New Mexico has a daily water consumption of over eight million gallons per day. Engineering support activities would also consume potable and non-potable water supplies. Consumption rates of potable supplies would be similar to the operational activities (i.e., 25 gallons per day per person). The use of non-potable water supplies, however, would depend upon the extant road and climatic conditions and the need to suppress fugitive dusts, cement mixing, etc. Water for these uses would typically be obtained from nearby surface waterbodies and/or non-potable water wells. Withdrawal permits would be obtained prior to initiation of any project, as applicable.

Construction of USBP checkpoints and other such permanent facilities would demand additional sewage treatment capacities. Subsequent tiered NEPA documents shall address these needs to ensure that existing treatment facilities would be capable of handling the additional flows without causing a permit violation. Some facilities may require individual treatment systems (e.g., septic tanks, oxidation ponds, etc.); these treatment systems would require permits from the appropriate local and state agencies.

4.2.2 Alternative 2. Full JTF-6 Support Without Implementation of ISIS Program

The effects that would be expected to occur upon implementation of this alternative would virtually be the same as those described for Alternative 1. The ISIS equipment would typically be installed at higher elevations and at greater distances from water supplies. In addition, due to the small area affected by each ISIS tower/facility, potential impacts to nearby water resources, if they occurred, would be negligible.

4.2.3 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

Implementation of this alternative would significantly reduce the potential for water resources to be adversely impacted. JTF-6 construction projects in support of INS would be eliminated under this alternative and only ISIS facilities would be installed. As mentioned above, installation of these facilities would not result in significant adverse impacts. The USBP would continue to patrol roads until they become impassable. Without the road improvements, erosion and sedimentation would continue and, perhaps, increase.

4.2.4 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Implementation of this alternative would result in slightly less water consumption than Alternative 1 by eliminating operational support activities. As mentioned above, only about 350,000 gallons of water would be saved for each large terrain denial exercise that is precluded. Engineering support activities would have the same potential effects on water supplies and regional water quality as described for Alternative 1.

4.2.5 Alternative 5. No Action

The No Action alternative would not require additional demands on water supplies and would eliminate the potential of accidental spills contaminating ground and surface water resources. No direct impacts to water bottoms or wetlands would be incurred. However, this alternative would allow the extant erosion and sedimentation to continue with concomitant adverse effects on surface water quality.

4.3 AIR QUALITY

Pollutant emissions estimates for existing stationary industrial sources operating within the 50 miles of the U.S./Mexico border study area are substantial. These estimates represent only a portion of the total pollutant emissions. Air pollutant emissions from mobile sources (e.g. automobiles, aircraft, construction equipment) and other widely dispersed activities (e.g. open burning) are also substantial in these areas. Many sources are not controlled, particularly in Mexico, but nevertheless have impacts on U.S. populations. Proposed actions by the JTF-6 in support of INS in these areas must be evaluated on a site-specific basis prior to commencement. Coordination with state and local regulatory agencies will be imperative to ensure proper notification, permitting, and documentation of potential impacts to air quality.

Equipment used for transporting materials and personnel, construction, and surveillance support operations utilize hydrocarbon fuels and internal combustion engines that emit air pollutants. Conveyance along unpaved roads and construction activities that disturb soil particles also result in the release of airborne particulate matter. Equipment and vehicles to be used for all proposed actions would be configured and maintained to conform with state and local air quality requirements. In some regions, regulatory agencies require specific notification of proposed actions and issue permits to operators of equipment and vehicles in accordance with air quality regulations (refer to Table 2-5).

4.3.1 Alternative 1. Full JTF-6 Support to INS, including the ISIS Program

Many of the proposed construction or maintenance projects are anticipated to be relatively short in duration and therefore are not expected to contribute long-term impacts. In areas that are chronically or acutely in violation of NAAQS, any additional contribution to air quality degradation could be considered significant

and would require adequate mitigation. Other proposed actions which involve increases in the number of surveillance vehicles, extended patrols, or other additional uses of hydrocarbon fuels and disturbance of particulate matter would have long-term impacts and would require evaluation on a site-specific basis.

A previously assessed project (U.S. Army, 1998a) involving road improvements, fence construction, and lighting installation activities was estimated to produce the following air emissions: 5,175 tons PM_{10}, 18.25 tons NO_x, 2.1 tons VOC, and 12.26 tons CO. This project included use of heavy construction equipment and other motorized vehicles during three months within a 1.6 mile-long corridor. The total estimated disturbed surface area was 46.6 acres. Air emissions were calculated under the guidance of the California Environmental Quality Act Air Quality Handbook. The combined proposed extent of actions and projects encompassed by this SPEIS include about 2,115 miles of road construction/maintenance and 329 miles of fence and barrier construction. Based on these data, the total cumulative impact of proposed actions would result in 423 times the linear extent of road/fence construction or about 30 times the surface area disturbed as that assessed in the example above. In terms of air impacts, the cumulative estimates are calculated to be in the ranges of: 36,500 to 2.2 million tons of PM_{10}; 129 to 7,420 tons NO_x; 15 to 866 tons VOC; and 87 to 4,973 tons CO. These emissions would be dispersed over the entire 2000-mile project corridor and during the next five years. Because most projects would be constructed in Texas, the majority of the emissions would occur in Texas. Again, emissions would have to be estimated on a project-to-project basis to ensure conformity with Federal standards and state implementation programs.

4.3.2 Alternative 2. Full JTF-6 Support Without Implementation of the ISIS Program

The effects to air quality under this alternative would be slightly less than that described for Alternative 1. Emissions from construction equipment used in the installation of ISIS facilities would be the only reductions realized under Alternative 2. Because these facilities are so small, construction activities would be accomplished rapidly and, thus, produce minimal emissions.

4.3.3 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

This alternative would result in almost negligible emissions since JTF-6/INS construction activities would be limited to installation of ISIS facilities. These facilities could be constructed rapidly thereby producing emissions for a very short duration. Ambient air quality conditions would probably return within 48 hours after completion of each ISIS facility. The lack of improved roads could increase fugitive dust. The magnitude of these effects would be the greatest in areas, such as El Paso and San Diego, that are currently classified as non-attainment for PM_{10}.

4.3.4 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Air quality emissions under this alternative would essentially be the same as those described for Alternative 1. Reductions in total emissions would be realized from the elimination of large operational support activities such as terrain denials and ground patrols, which would typically require generators, mess facilities, and military vehicles.

4.3.5 Alternative 5. No Action

The No Action alternative would eliminate all potential emission sources associated with JTF-6 engineering and operational support services. Without the repair and maintenance activities on some roads, erosion rates would probably increase, potentially exacerbating fugitive dust levels. If such conditions occur within areas that are classified as being in non-attainment for PM_{10}, regional air quality standards could be exceeded.

4.4 NOISE

4.4.1 Alternative 1. Full JTF-6 Support to INS, including the ISIS Program

Implementation of this alternative would result in temporary and local increases in noise levels during the construction activities. Road and fence construction in urban areas would produce very little change in ambient noise levels since such areas typically have higher ambient levels due to industrial operations, traffic, and other similar construction activities. Fences are typically constructed near population centers. Road and other major construction activities could occur in rural, and sometimes, remote areas; such activities would increase noise levels to much higher levels than ambient conditions. However, due to the short-term expected for the construction and because construction would only occur during daylight hours, these short-term increases are not expected to significantly affect wildlife or other sensitive receptors. Depending upon the location of specific projects, some recreationists may be disturbed by increased noise levels; these disturbances would be temporary and sporadic and, thus, are not considered as potentially significant impacts.

Some operational activities (e.g., weapons training and helicopters) could cause long-term increases in noise levels. The magnitude of these increases would depend upon ambient levels, distance to sensitive receptors, increase in number of such operational activities and duration. Firing ranges are typically located at remote sites for safety purposes. They are also used sporadically and mostly during daylight hours. Therefore, although noise levels in the vicinity of new or expanded firing ranges would increase, the long-term effects would not be considered significant.

Overflights from helicopters and fixed-wing aircraft would cause temporary increases in noise levels. Although very limited qualitative data exist regarding effects to wildlife species from overflights, several studies have indicated that most wildlife, including some endangered species such as Sonoran pronghorn, illicit a startled response at first, but then appear to resume normal feeding or resting behaviors (Ellis, 1988; Ellis and Mindell, 1991; Krausman, et al., 1993; and U.S. Department of Justice, 1998). Low-level overflights during breeding seasons may produce greater or more traumatic responses, however, and thus should be avoided to the extent practicable. Long-term increases could occur around regional airfields if the number of aircraft and/or reconnaissance missions are increased to enhance USBP detection capabilities.

4.4.2 Alternative 2. Full JTF-6 Support Without Implementation of ISIS Program

Implementation of this alternative would result in temporary and local increases in noise levels during the construction activities. Road and fence construction in urban areas would produce very little change in ambient noise levels since such areas typically have higher ambient levels due to industrial operations, traffic, and other similar construction activities. Fences are typically constructed near population centers. Road and other major construction activities could occur in rural, and sometimes, remote areas; such activities would increase noise levels to much higher levels than ambient conditions. However, due to the short-term expected for the construction and because construction would only occur during daylight hours, these short-term increases are not expected to significantly affect wildlife or other sensitive receptors. Depending upon the location of specific projects, some recreationists may be disturbed by increased noise levels; these disturbances would be temporary and sporadic and, thus, are not considered as potentially significant impacts.

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4.4.3 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

Implementation of this alternative would significantly reduce noises associated with the elimination of major construction activities. However, as mentioned under Alternative 1, increases in noises would be mostly temporary and sporadic and, thus, would not be considered a significant adverse impact. Overflights, training at firing ranges, and other operational activities would still occur and produce noise. The magnitude of these effects would depend upon the variables described under Alternative 1. There would be no significant long-term effects anticipated.

4.4.4 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Some reductions in noise production would be realized under this alternative scenario, primarily due to the lack of JTF-6 aerial reconnaissance missions and JTF-6 weapons training for INS/USBP agents. Because the operational support actions occur sporadically and often in remote locations, the reductions in the noise levels would be minimal. Noise would continue to be generated by engineering construction activities. Although the magnitude of these effects would depend upon the location, season, duration, and type of construction activity, no long-term significant impacts are expected to result from JTF-6's support to INS projects.

4.4.5 Alternative 5. No Action

The No Action Alternative would eliminate the potential for any increases in noise levels from JTF-6 construction and operational activities.

4.5 BIOLOGICAL RESOURCES

This subsection is further subdivided into three main discussions: vegetation, fish and wildlife, and threatened and endangered species.

4.5.1 Vegetation

Vegetation communities, as discussed in Chapter 3 and in each volume of the Technical Support Documents, are quite diverse along the U.S./Mexico border region, ranging from coastal marshes to semi-desert grasslands and scrub to mountainous forests. Most of the project region is rural and, consequently, provides valuable habitat for numerous and varied wildlife populations. Types and magnitude of impacts to vegetation communities from INS and JTF-6 actions are also varied. Where practicable, the agencies

attempt to avoid impacts to native vegetation by utilizing existing or previously disturbed areas or by implementing actions with less potential for ground disturbances. Disturbed lands include those that have been graded, paved, plowed, or replanted with non-native vegetation. Some concerns exist that improved roads could increase opportunities for trespassing and poaching, especially for sensitive species that are valued by collectors. However, enhanced patrol efforts allowed by improved roads should reduce illegal traffic and the potential for poaching activities. Some USBP stations have recently experienced such reductions, as indicated by significant decreases in apprehensions in areas where road improvement projects were completed (USBP, 1998).

Indirect effects have occurred to wildlife habitats by illegal entrants diverting around fences or away from areas that are heavily patrolled. Improvements in the infrastructure and increases in patrol activities have resulted in some illegal entrants redirecting their efforts into other remote areas. Increases in illegal foot and vehicle traffic would result in damages to wildlife habitat. These damages would be expected to be offset, however, by the reduced damages from illegal traffic in other areas that the illegal entrants were avoiding.

4.5.1.1 Alternative 1. Full JTF-6 Support to INS, including the ISIS Program

As mentioned in section 4.1.1, this alternative would result in the disturbance of approximately 6,900 acres, primarily due to road, fence, and vehicle barrier construction projects. This estimate should be considered as a worst case scenario given that the majority of acres are impacted by road projects and most of these road projects are repair or upgrade activities. Thus, the road ROW has been previously disturbed.

The majority (64 percent) of the proposed road projects are expected to occur in Texas, primarily in the western half of the Texas Land Border study area. Consequently, most of the impacts to vegetation communities would occur within Chihuahuan desert scrublands. Impacts to vegetation from road projects are fairly consistent among the other three states: 636 acres in New Mexico; 1,015 acres in Arizona; and 639 acres in California. Vegetation communities within the New Mexico study region are comprised of Chihuahuan desert scrublands. Sonoran desert scrublands would be the primary vegetation community type impacted in Arizona. California chaparral and California coastal scrub would be the types of habitat that would be most affected by the proposed road improvement projects in California.

The operation and maintenance of drag roads may affect vegetation by causing dust to settle on leaves, thus potentially hindering photosynthesis and evapotranspiration. The magnitude of these effects would depend upon the frequency of dragging operations, soil type, and weather patterns. Because of the slow speed at which roads are dragged, it is highly unlikely that collisions with animals would occur. Some species (e.g., Sonoran pronghorn) could benefit from the maintenance of drag roads by continuously inducing new forb growth along the edges of the roads. Sonoran pronghorn have also been observed using drag roads for resting areas, presumably because the openness allows greater visibility to detect predators (Hervert, 1999).

Fence projects would also alter vegetation communities. The same amount of fence projects are planned for both California and Texas; fence projects in these two states comprise 83 percent of the total miles of proposed fences. Thus, most of the habitat that would be altered or disturbed would occur within California chaparral or California coastal scrublands and Chihuahuan desert scrublands. Tamaluipan brushland and mesquite thornscrub communities would be impacted along the Lower Rio Grande below Laredo, Texas. Sonoran desert scrublands in eastern California would be affected also, but to a much lesser extent.

Some operational support activities would produce impacts to vegetation communities. Clearing vegetation for bivouac areas or use of live vegetation for camouflage is prohibited during operational activities. Ground patrol and terrain denial support missions could affect vegetation communities depending upon the size, duration and season of the mission. The primary activity within these types of operations that would impact vegetation would be bivouac activities and off-road vehicle traffic. The actual reconnaissance field

activities would not result in significant adverse cumulative impacts due to the sporadic and short-term nature of these operations. Trampling and crushing of some vegetation would occur, but all vegetation, including that located within bivouac areas, would be expected to begin recovery to pre-project conditions within one year after cessation of the operation.

The remaining operational and all general support services produce negligible to no effect upon vegetation communities.

4.5.1.2 Alternative 2. Full JTF-6 Support Without Implementation of ISIS Program

Elimination of the additional remote sensing capabilities proposed under this alternative would result in a negligible reduction (about 60 acres) of habitat impacts. Most of these reductions would occur within the western portions of the Chihuahuan and Sonoran desert scrublands.

JTF-6 would still be allowed, with SECDEF approval, to provide operational support to INS entities. Operational support missions, such as ground patrols, would cause temporary effects to vegetation communities. Vehicular traffic, command centers, bivouac areas, and soakage pits, are some of the activities associated with operational support missions that could have adverse effects on the vegetation communities. The magnitude of these effects, and the time it would take for the community to recover, would depend upon several biotic and abiotic conditions including, habitat type, size of the area, season that activity occurred, weather patterns prior to and after the action, and previous condition of the community.

JTF-6 would also continue to provide engineering support for such actions as obstacles courses, weapons training ranges, kennels, communication towers, and small administration buildings. The magnitude of the adverse impacts to vegetation communities would vary depending upon the type, size and location of the project. With the possible exception of weapons training ranges and some communication towers, most of these types of minor construction projects would be expected to occur in previously disturbed areas, adjacent to existing administration facilities.

4.5.1.3 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

Implementation of this alternative would result in significant reductions of habitat impacts, compared to Alternatives 1 and 2. INS construction activities under this alternative would be limited to installation of the ISIS systems. These actions would alter approximately 60 acres throughout the entire study corridor. Thus, changes to the vegetation communities would be inconsequential.

JTF-6 would still provide operational support services to USBP and other INS entities, which would result in temporary disturbances to vegetation communities. These impacts would be the same as those described in section 4.5.1, above.

4.5.1.4 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Impacts to vegetation under this scenario would be slightly less than that described for Alternative 1. The elimination of the operational support activities would be the reason for the reductions. However, as indicated in the Alternative 1 discussion, operational activities would cause minor, temporary effects to vegetation. Thus, the differences in vegetation impacts of the two are negligible.

4.5.1.5 Alternative 5. No Action Alternative

Implementation of the No Action alternative would eliminate direct adverse effects to vegetation communities along the border since no JTF-6 engineering and operational support actions would occur. However, indirect adverse effects may increase due to the continued and increasing illegal vehicle and foot traffic, wildfires, and erosion. Furthermore, no additional information regarding habitat types occurring along the border would be gathered by biologists providing services to INS/JTF-6.

4.5.2 Fish and Wildlife Resources

With the exception of the abundant aquatic and marine environs along the Texas Gulf of Mexico and California Pacific coasts, permanent aquatic habitats are rare within the study corridor. The Rio Grande in Texas and New Mexico, Colorado River in Arizona and California, and Tijuana River in California are the major waterbodies occurring within the U.S./Mexico border area. Between 1994 and 1999, JTF-6 and INS projects have directly affected three permanent waterbodies which are capable of supporting aquatic organisms: an unnamed stream along Maroon Valley Road, Spring Canyon, and the Tijuana River. The projects affecting Spring Canyon and the Tijuana River are currently under construction and will be discussed in more detail in the cumulative impacts section. All of these aquatic communities are located in San Diego County, California. Currently, the INS is planning to construct seven boat ramps along the lower Rio Grande to facilitate deterrence and enforcement of illegal entries. The location and design of these ramps are yet undetermined, although less than one acre of water bottom would be expected to be disturbed at each boat ramp. The hard substrate provided by the boat ramp would eventually support populations of periphyton and provide protective and feeding structure for nektonic species.

Erosion and sedimentation from border roads constructed along the Rio Grande and other waterbodies could cause indirect effects upon fish populations. The magnitude of these effects are not known at present and would depend upon the efficiency of erosion control measures emplaced, time of year, distance from a permanent water body, and current quality conditions of the water body. Upgrading of some border roads would have beneficial effects upon fish populations by reducing erosional and sedimentation problems. For example, JTF-6 rerouted roads near Candeleria, Texas and the Campo-Tecate, California area that had been constructed immediately adjacent to streambeds. These roads had continuously experienced erosion problems during severe thunderstorms and/or flood events, with the concomitant effects of turbidity and sedimentation within the streams. These roads were allowed to naturally revegetate once they were routed out of the riparian communities. These actions decreased the erosion along the abandoned roadway and provided an additional vegetative buffer between the new roads and the streams.

Water crossings and boat ramps are the only actions that would directly impact aquatic ecosystems. As mentioned above, some structures placed in permanent water bodies would provide beneficial effects to benthic and periphyton communities. Wildlife populations, on the other hand, would be expected to incur some disturbances as well as direct and indirect losses due to INS and JTF-6 actions, as discussed in the following paragraphs. Substantial increases in boat traffic, if it occurs, could potentially affect some wildlife species, particularly ocelot and jaguarandi which use the riparian habitat along the Rio Grande. These effects would need to be addressed in project specific NEPA documents tiened to this SPEIS.

4.5.2.1 Alternative 1. Full JTF-6 Support to INS, including the ISIS Program

JTF-6 operational support activities will result in minor and temporary disturbances to wildlife populations. Ground patrol and terrain denial exercises could disrupt wildlife populations, particularly if conducted during breeding or nesting seasons. The majority (75 percent) of these types of exercises have been ground patrol activities which are typically smaller and less intrusive than the terrain denial activities. Since 1989,

only 28 terrain denial operations have been conducted, each of which encompassed an area large enough to produce troop densities of about one military personnel per two to four square miles. Weapons training activities during the terrain denial operations are performed at established firing ranges only. Other operational and all general support activities would not be expected to adversely impact wildlife populations.

JTF-6 engineering support missions could result in the alteration of up to 6,900 acres of vegetation communities, thus producing concomitant effects upon wildlife populations. Construction of roads, fences and large facilities (e.g., USBP checkpoint) would have the greatest adverse effect on wildlife. Tables 4-3 and 4-4 present estimates of individual wildlife that would be lost due to the alteration of habitats within the Chihuahuan and Sonoran desert scrublands, respectively. These two major biomes were used in the impact analysis since they cover the majority of the study area and most of the projects would be located within these two biomes. It should be emphasized however, that these are worst case estimates for the entire 5-year period. Since this is a programmatic document, the timing, type and location of specific projects are not known at the present time. Road construction projects typically involve repair or improvements rather than new construction. Many repair and upgrade missions stay within the existing right-of-way and, thus, would not result in additional alterations of the surrounding habitat. It should also be noted that these losses could potentially occur throughout the 40 million-acre study area and that these individual numbers represent numerous and various species.

Table 4-3. Potential Losses to Wildlife Populations from Habitat Alterations Within Chihuahuan Desert Scrublands[1] (Primarily Texas and New Mexico)

Project Type	Acres	Lizards		Birds		Small Mammals	
		Min.	Max.	Min.	Max.	Min.	Max.
Roads	4,757	9,514	66,598	238	4,281	1,284	2,711
Fences	218	436	3,052	11	196	59	124
Other Projects	72	144	1,008	4	65	19	41
TOTAL	5,047	10,094	70,658	253	4,542	1,362	2,876

[1] Minimum lizard density 2 individuals/acre; Maximum lizard density 14 individuals/acre; Minimum bird density 0.05 individuals/acre; Maximum bird density 0.90 individuals/acre; Minimum small mammal density 0.27 individuals/acre; Maximum small mammal density 0.57 individuals/acre

Source: U.S. Army, 1994 and GSRC

Table 4-4 - Potential Losses to Wildlife Populations from Habitat Alterations Within Sonoran Desert Scrublands[1] (Primarily Arizona and California)

Project Type	Acres	Lizards	Birds	Small Mammals	
		Average	Average	Min.	Max.
Roads	1,651	130,429	1,387	14,859	29,718
Fences	179	14,141	150	1,611	3,222
Other Projects	8	632	7	72	144
TOTAL	1,838	145,202	1,544	16,542	33,084

[1] Lizard density 79 individuals/acre; bird density 0.84 individuals/acre; minimum mammal density 9 individuals/acre; maximum mammal density 18 individuals/acre

Source: U.S. Army, 1994 and GSRC

Roads and fences can result in other, indirect impacts. Improved roads, by design, would increase the speed at which vehicles can travel and may increase traffic as well. Higher vehicular speeds could decrease the response time for wildlife to avoid the vehicles, thus, increasing the number of accidental wildlife deaths. The roads could even become an attractant to some species such as snakes and killdeer. Fences would serve as a barrier to wildlife species; the magnitude of this effect would depend upon the fence design and location. Fences that would be barriers to wildlife are generally constructed at or near POEs, which are located within very developed areas. Consequently, such fences would not be expected to have a significant effect on wildlife movement. Vehicle barriers would not impede wildlife movement nor remove/alter significant amounts of wildlife habitat.

On the other hand, roads and fences have afforded protection to some wildlife species and other sensitive resources. Fences do significantly reduce illegal entries and, indirectly, reduce the amount of foot traffic within wildlife communities on the U.S. side of the border. Similarly, improved roads have increased the efficiency of USBP agents to apprehend illegal entrants. Less illegal traffic results in fewer off-road impacts to wildlife populations.

The potential for accidental fires caused by catalytic converters increases under this alternative due to improved access to remote areas and an increase in patrol vehicles and trips. To reduce this potential, USBP agents would be made aware of these hazards and attempt to park on bare ground while at observation points and reduce idling time, where practicable. Any fires that do occur will be immediately reported to the proper authorities.

Lights can have detrimental effects on wildlife populations by altering circadian rhythms, disrupting dispersal courses, and increasing potential to predation. Some nocturnal predators (e.g., toads, bats, geckos, and some insectivorous birds) may benefit from lighting projects by concentrating insects that are attracted to the lights. The magnitude of the effects of lighting projects would depend upon the season, duration, location, intensity, and direction of the lighting as well as the presence of protected species. Some protected species, such as ocelots and jaguarundi, could incur disruptions to their normal behavior. More discussions regarding these species are presented later in section 4.6.

4.5.2.2 Alternative 2. Full JTF-6 Support Without Implementation of ISIS Program

Alternative 2 would result in virtually the same impacts to wildlife populations due to the implementation of Alternative 1. However, the potential adverse effects from lighting projects would be reduced or eliminated under this alternative, depending upon whether lighting is part of the overall ISIS program within a specific area. Elimination of other ISIS components would not result in significant reductions in wildlife impacts.

4.5.2.3 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

If Alternative 3 were implemented, the major JTF-6 engineering and operational projects would not occur and, consequently, the potential impacts to wildlife populations would be significantly reduced. The potential impacts quantified previously in Tables 4-3 and 4-4 would not be incurred.

Some indirect benefits to wildlife would not be realized under this alternative. That is, without the protection afforded by improved roads, fences, vehicle barriers, and other measures intended to increase the efficacy of the USBP, the habitats which support wildlife would continue to be subject to heavy foot and off-road vehicle traffic, erosion and sedimentation, and wildfires set by drug traffickers and other illegal entrants. Such USBP deterrence enforcement activities have been credited with saving sensitive natural resources as well as human lives (Ervine, 1998; Ellingwood and Schoch, 1998).

4.5.2.4 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Under this scenario, potential impacts to wildlife would be very similar to those described under Alternative 1. The minor and temporary effects to wildlife generally caused by JTF-6 operational support activities would not be incurred under this alternative. General support activities would have no impact on wildlife populations; however, construction projects provided under JTF-6 engineering support services would have the same effects as described previously in tables 4-3 and 4-4. The indirect, beneficial effects, as described in Alternative 1, would also be realized if this alternative would be implemented.

4.5.2.5 Alternative 5. No Action Alternative

Since JTF-6 engineering and operational support projects would not happen under the No Action alternative, direct habitat alterations would not occur and, in turn, impacts to wildlife populations would not be incurred. However, without the infrastructure needed for the USBP to deter and apprehend illegal traffickers, wildlife populations would continue to experience losses due to habitat losses caused by off-road traffic, wildfires, and erosion.

4.5.3 Threatened or Endangered Species

Although INS and JTF-6 strive to avoid impacts to Federal and state protected species, three accidents involving specimens of threatened and endangered species have occurred since 1989. However, beneficial effects on protected species also have resulted from JTF-6 actions through habitat protection and enhancement as well as expanding the knowledge of species distribution and habitat suitability (Ervin, 1998; Ellingwood and Schoch, 1998). For example, JTF-6 constructed an ocean fence at Imperial Beach which has reduced illegal traffic on the beach where least terns nest. JTF-6 also acquired and planted approximately 12 acres of coastal sage scrub in San Diego County as mitigation for a project completed in the early 1990s. As compensation for one of the accidents that occurred prior to 1994, JTF-6, in consultation with the USFWS, contracted a study at known locations of the Lloyd's mariposa cactus in southwest Texas. Findings of the study were submitted to the USFWS.

The Yuma Sector of the USBP routinely assists the Arizona Game and Fish Department and USFWS by providing helicopter reconnaissance during inventories of Sonoran pronghorn. It also appears that Sonoran pronghorn tend to utilize the USBP drag roads for resting and foraging areas, presumably since the dragging activities encourage new forb growth (Hervert, 1999).

Improvements to roads in the Otay Mountain area in San Diego County, California, allowed the USBP to conduct their patrol activities more effectively, significantly curtailing the amount of illegal cross-country traffic that was occurring in this area. The illegal entrants had caused a great deal of damage to native vegetation, much of which is contained within Wilderness Study Areas, by repeated trampling, burning and cutting.

All NEPA documents prepared by INS and JTF-6 are submitted to the USFWS and appropriate state resource agency(s) for review. These documents generally contain information regarding the results of surveys for protected species and/or suitable habitat that may occur within the project area. These surveys and the resultant information would not typically be available to the resource agencies without the efforts of INS and JTF-6. For example, INS is recently prepared Biological Assessments as part of Section 7 consultation for the USBP Yuma and Tucson Sector operations. These assessments not only address potential effects to protected species, but also identify changes in daily operations that would be

implemented to avoid or mitigate these effects. INS and JTF-6 will continue to coordinate with the appropriate U.S. Fish and Wildlife Service field office to address potential impacts to species proposed or listed as threatened or endangered (including reintroduction or recovery efforts) during the preplanning stages and/or prior to undertaking site-specific activities related to the preferred alternative.

Since 1994, only one incident involving Federally protected species occurred. A JTF-6 military unit providing engineering support in 1994 to the USBP in San Diego County was erroneously informed to dispose of excess borrow material in an area that contained vernal pools. Vernal pools not only are a valuable wetland resource, but also support populations of San Diego button celery (*Eryngium aristulatum* var. *parishii*). JTF-6 immediately began coordination with the USFWS and USEPA for restoration of the pools. All foreign material (dirt, cobbles, and boulders) was meticulously removed; the final stages of removal were all performed by hand to ensure that the clay pan of the vernal pool was not disturbed. A 2-year monitoring study was conducted to ensure that the habitat was restored and the San Diego button celery populations were not in jeopardy. The study concluded that the San Diego button celery populations were probably at higher densities than "pre-project" conditions. An additional benefit was that 1-2 new vernal pools were inadvertently created by heavy equipment used during the restoration activities (U.S. Army, 1996).

Two other incidents occurred prior to 1994. These incidents occurred even though the areas supporting the protected species had been marked as off-limits areas. All of these incidents were caused by miscommunications. JTF-6 has since intensified and expanded its environmental briefing and training programs to ensure such incidents do not occur. As a result, no incidents have occurred in the past five years.

4.5.3.1 Alternative 1. Full JTF-6 Support to INS, including the ISIS Program

As mentioned previously, INS and JTF-6 plan and design projects to avoid adverse impacts, especially to threatened or endangered species. Professional biologists are utilized by INS and JTF-6 to survey proposed and alternate routes and locations in order to locate and avoid areas that support protected species. Although only about 10 feet of vegetation on either side of an existing road is disturbed by repair/upgrading activities, the biologists are required to survey an entire ROW of 50-100 feet to ensure identification of all protected species and/or their suitable habitat within the potential area of effect. Whenever such areas are located, the biologists flag the area to ensure that construction units avoid the sites. Flagging is removed upon completion of the construction to eliminate the potential of attracting attention to the area. Additionally, professional biologists may provide monitoring on some activities during the construction phase, particularly for road, range and fence projects, to further reduce the potential of accidental impacts on protected species. The use of monitors is especially useful in avoiding impacts to protected animal species that may occur outside the ROW but have the potential to traverse the area during construction. No such occurrences have been reported as yet and due to the relative short duration of construction (conducted during daylight hours only) and the narrow, linear feature of most construction project areas, no indirect impacts to protected species would be expected outside the construction ROW.

Lighting projects may have the potential to adversely effect some protected species and INS is currently conducting studies to determine the magnitude of these potential impacts and any mitigation feature that may be required. The results of these studies will be considered and incorporated to any future lighting project performed by INS or JTF-6.

New road construction into or through areas that were previously not accessible to the general public could invite or encourage poaching of rare plants and animals. Road upgrading could also encourage trespassing where public roads traverse private lands. The magnitude of this impact would depend upon the proximity of the road to urbanized areas, and efficiency of law enforcement activities. In this regard, road

upgrading/construction operations are intended to enhance patrol activities and, thus, should facilitate reductions in poaching and trespassing.

4.5.3.2 Alternative 2. Full JTF-6 Support Without Implementation of ISIS Program

As is the case of the Alternative 1 actions, no impacts would be expected to occur to threatened or endangered species if Alternative 2 would be implemented. INS and JTF-6 would make every effort practicable to ensure avoidance of protected species and their habitat. INS and JTF-6 would also continue to use professional biologists to confirm or refute the presence/absence of protected species or suitable habitat. For major construction projects where protected species are known or presumed to occur, INS and JTF-6 would continue to use biologists to monitor construction progress, as deemed necessary. Such assessments would be coordinated with USFWS and the appropriate state resource agency. This alternative would eliminate any potential of adverse effects to protected species from lighting projects.

4.5.3.3 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

Implementation of this alternative would eliminate most, if not all, potential impacts (direct and inadvertent) to threatened or endangered species caused by JTF-6 engineering support projects. The greatest factor jeopardizing the majority of protected species is the loss or alteration of habitat. This alternative would significantly reduce major construction activities and consequentially reduce the potential to impact protected species habitats and/or individual specimens of protected species. However, given the environmental design features employed by INS and JTF-6 to avoid impacts to protected species, the potential direct impacts (i.e. loss of individual specimens) should never be realized.

Potential impacts to protected species from lighting projects would remain an issue. That potential could increase due to the need to increase lights if roads, fences, and other barriers are not provided. Without the engineering activities, however, illegal foot and vehicle traffic would probably increase, thereby producing long term adverse effects to protected species. Use of other types of lighting, such as low sodium vapor lights, could be used to mitigate the illumination effects on wildlife.

4.5.3.4 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Since JTF-6 operational support missions would have minimal potential to impact threatened or endangered species, implementation of this alternative would produce similar effects to protected species as those described under Alternative 1. As mentioned previously, JTF-6 operational support actions typically result in minor and temporary disturbances to vegetation communities and wildlife populations in general. The differences, therefore, between alternatives 1 and 3 relative to threatened and endangered species effects is negligible.

4.5.3.5 Alternative 5. No. Action

Direct impacts to protected species would be eliminated upon implementation of this alternative. Indirect effects would continue due to off-road traffic, wildfires, poaching, and erosion. The rate of these effects could increase as road conditions deteriorate and USBP's efforts to patrol remote areas are hampered or precluded. No new information regarding threatened or endangered species and their habitats would be collected from INS and JTF-6 project surveys.

4.6 SOCIOECONOMIC RESOURCES

INS and JTF-6 activities generally result in beneficial impacts to local, regional and national economies. The diversity of projects performed by INS and JTF-6 implies that socioeconomic impacts would vary considerably. Some projects have very small construction and operational impacts while others are more substantial in terms of construction costs, impacts, and project magnitude. The actual construction activity impacts are usually very localized due to the temporary nature of the construction activities and the fact that JTF-6 provides labor for these projects. Consequently, the purchase of construction materials and supplies (increase in local sales and income) is typically the primary, direct economic effect in the project vicinity.

Although construction impacts are temporary in nature, the effects associated with implementation of INS/JTF-6 projects are expected to continue for the economic life of the project. All actions provide socioeconomic benefits from increased detection, deterrence, and interdiction of illegal drug smuggling activities with concomitant benefits of reduced enforcement costs, losses to personal properties, violent crimes, and entitlement programs. These actions can also have direct positive benefits from increased economic activity. In addition, though not part of the JTF-6 mission, JTF-6 activities improve the capability of USBP agents to police immigration activities and thereby provide socioeconomic side-benefits from reduced illegal immigration.

Executive Order 12898 of February 11, 1994, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" required each Federal agency to identify and address, as appropriate, disproportionate adverse effects of its proposed actions on minority populations and low-income communities.

As indicated in the Environmental Baseline Documents (INS/JTF-6 1999) and summarized in sections 3.1.10, 3.2.10, 3.3.10, 3.4.10, and 3.5.9 of this SPEIS, the entire border region is characterized by high minority populations. Within the Texas land border alone (the largest of the study corridors), the minority populations represent 78 percent of the total counties' population (U.S. Army 1998c). The economic status and population density or composition of the communities does not differ greatly among cities of comparable size within the study area. None of the projects proposed or completed to date would/has displace or residences or commercial structures. Therefore, siting of future projects would not be expected to disproportionately affect minority and/or low-income populations. Furthermore, implementation of any of the alternatives would enhance the probability of success for the INS/USBP although the levels of enhanced success would vary among alternative. This increased success in controlling illegal drug activity would benefit all populations, regardless of income, nationality or ethnicity.

In addition, construction activities would have short term, but positive impacts on local economies from sales of construction materials, other project expenditures, and temporary employment. Long term positive impacts would occur on local, regional and national levels by the reduction of illegal immigrants and drug trafficking and the associated social costs. Future site-specific NEPA documents tiened to this SPEIS would be required to address environmental justice issues of that project within the region.

Effects to the aesthetics and/or quality of life could be incurred in certain regions that experience significant new construction actions or increases in patrolling activities. These effects can be either positive or negative, depending upon an individual's judgement. The magnitude of adverse effects, however, would be expected to increase in remote areas rather than in urban or developed areas. Increases in patrolling activities as well as construction activities near wilderness areas, parks, National monuments, and other such sensitive areas would cause the greatest adverse effects, although the impacts are difficult to quantify.

Each alternative would require the use of military troops in the border region, as directed by the National Defense Authorization Act and the President's National Drug Control Strategy. The number of troops and/or missions would vary greatly among the alternatives, as described in Section 2, and depending upon the type of support provided under the selected alternative. For instance, operational support could require as few as 2-3 personnel (for LP/OP support) to as high as 450 personnel (for terrain denial support). Large construction engineering missions would typically have and average of 80-120 personnel. It should be re-emphasized that JTF-6 units are not armed and rely solely on the USBP agents to provide security for the military personnel.

It is highly likely that illegal entrants will attempt to avoid fences, vehicle barriers, and other impediments by choosing to enter areas that are remote and foreboding. Lives have been lost because persons were not adequately prepared for the harsh desert environment; the possibility of other deaths to occur would increase as people take greater chances. However, the detection and apprehension mission of INS has evolved to include the cooperation and coordination with other emergency services to rescue illegal entrants before they get into life-threatening situations. In fact, such rescues have become a daily occurrence along the border.

4.6.1 Alternative 1. Full JTF-6 Support to INS, including the ISIS Program

Positive impacts on socioeconomic resources would be greatest from Alternative 1 because of temporary localized benefits from construction activities and long term local and nationwide benefits from the law enforcement assistance provided by these items. Direct expenditures from INS construction projects and JTF-6 support actions have direct benefits within the area of the actions. Since the personnel are brought in on a short-term basis and some materials and supplies are brought into the local areas, the expenditures occurring within the local areas are typically relatively small. The expenditures that do occur within the local areas are subject to economic multiplier effects.

The direct impacts from locally purchased materials would have indirect and induced multiplier impacts within the regional economy. Table 4-5 provides multiplier indices for several counties within the study area. As can be seen from this table, economic multipliers are quite varied, ranging from 1.25 to over 3.0. Areas with large populations and diverse economies, such as El Paso, Texas, and San Diego, California, have high multipliers. Rural areas with small population densities and narrow economic bases have small multipliers since needed labor and materials must be imported to the area. The multiplier indicates the total impact of an action or project as estimated from the direct expenditures. For example, if the direct local expenditures of an action are $1,000,000 and the multiplier for the area of impact is 2.0, then the total impact on sales within the affected area would be $2,000,000. The overall impact on local sales, income and employment from a hypothetical construction project is also demonstrated in Table 4-5.

As indicated previously, the greatest need for construction projects to satisfy the INS/USBP mission is in Texas. Thus, the majority of direct economic benefits would be experienced in this state. At this time, New Mexico would incur the least amount of these benefits. JTF-6 operational and general support actions tend to increase short-term employment, income and sales within local areas due to direct expenditures but at levels that are insignificant.

The National Drug Control Strategy (Office of National Drug Control Policy, 1998) projects up to 1,000 new USBP agents should be hired over the next 10 years. Filling these new positions would increase employment, income and sales within local and regional economies both directly and indirectly. The magnitude of these effects would depend upon the size and economic condition of the community affected, the number of positions filled, and the number of local persons hired to fill the positions. As discussed in Chapter 1 of this SPEIS, these new agents will require new and/or upgraded infrastructure (e.g., roads, fences, ISIS, etc.) in order to effectively perform their duties.

All INS and JTF-6 actions provide socioeconomic benefits from increased detection, deterrence, and interdiction of illegal drug smuggling activities with concomitant benefits of reduced enforcement costs, losses to personal properties, violent crimes, and entitlement programs. The annual cost of illegal drugs to our society is about $67 billion. The cost of incarceration of drug-related criminals alone exceeds $19 billion. Since 1990, drug-related deaths have increased by 42 percent, although illegal drug use has remained fairly stable over the same period. Enforcement activities have had a significant effect on illegal drug trafficking. Incarceration of drug offenders increased by 95 percent during the period between 1989 and 1995. The amount of cocaine available for consumption in the U.S. dropped during the same period by 31 to 34 percent. Since more than half of the cocaine consumed in the U.S. enters the country across the southwestern border, such effective enforcement actions would have significant beneficial impacts on the areas along the border (Office of National Drug Control Policy, 1998).

Table 4-5. Economic Multipliers for Selected Counties

			Example Impact of $1,000,000 Hypothetical Construction Project		
County, State	Major City	Multiplier	Sales ($)	Income ($)	Employment
Cameron, TX	Harlingen	2.35	$1,148,000	$379,000	22
Starr, TX		1.49	418,000	163,000	18
Webb, TX	Laredo	2.03	879,000	291,000	17
Val Verde, TX	Del Rio	1.70	594,000	245,000	16
El Paso, TX	El Paso	2.59	1,358,000	434,000	23
Hidalgo, NM		1.32	273,000	134,000	9
Dona Ana, NM	Las Cruces	1.88	747,000	303,000	17
Yuma, AZ		1.77	653,000	261,000	13
Pima, AZ	Tucson	2.77	1,513,000	542,000	28
Imperial, CA		1.68	577,000	221,000	10
San Diego, CA	San Diego	3.07	1,765,000	596,000	25

Source: U.S. Army, 1994.

Increased detection and apprehension of illegal immigrants would also have beneficial effects on local, regional and national economies. James (1991) indicated that public education alone of illegal immigrants cost the American taxpayers $2.7 to $3.4 billion annually. Because the exact number of undocumented persons residing in the U.S. can not be ascertained, it is difficult to accurately estimate the number of entitlement programs that are affected by illegal immigrants and the costs to each of these programs. James (1991) reported that up to 32 percent of undocumented persons have applied for and received Women, Infants, and Children (WIC) coupons; about 15 percent received unemployment insurance compensation; and nearly 10 percent received food stamps. Some citizens and private organizations have expressed concerns regarding the use of troops along the border. While this issue is controversial, as indicated in the summary, it should be emphasized that all JTF-6 units would comply strictly with the Posse Commitatius Act, JCS Instruction 3121-02 (Rules on the Use of Force by DoD Personnel during Military Operations Providing Support to Law Enforcement Agencies Conducting Counter-Drug Operations in the United States), and other applicable laws. Implementation of the preferred alternative would result in the greatest potential of high numbers of troops working along the border, since it would provide full JTF-6 support.

4.6.2 Alternative 2. Full JTF-6 Support Without Implementation of ISIS Program

Socioeconomic benefits to local economies that would result from implementation of Alternative 2 would be similar to those described for Alternative 1 since only very minor construction actions (e.g., RVS and communication towers) would be eliminated. The larger construction actions would still be completed with the concomitant direct benefits due to local sales, temporary labor, and income. The indirect benefits would also be reduced, since the overall enforcement strategy would not be accomplished. The magnitude of this reduction would be difficult if not impossible to quantify since data are not maintained concerning detection and apprehensions by type of enforcement method. If the efficacy of the USBP is adversely affected by the elimination of the remote sensing methods, more illegal drugs and immigrants would be able to enter the United States undetected, which, in turn would result in increases in crime, non-productivity, domestic violence, and costs of social programs. This alternative would result in the same controversies regarding military units along the border as Alternative 1. Both alternatives provide full JTF-6 support.

4.6.3 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

If Alternative 3 is implemented, most major construction activities and, thus, the local and regional economic effects, would be eliminated. Since JTF-6 would continue to provide operational support to INS entities, Alternative 3 would have some direct, but lower, positive local impacts from related expenditures. The magnitude of these effects would depend upon the size and duration of the operational support activities. An LP/OP mission typically would require significantly less expenditures than a large terrain denial exercise. Still, the overall enforcement strategy could not be achieved under this alternative. Therefore, long term local and nationwide benefits from reductions in illegal drug smuggling and immigration, would be smaller than from Alternatives 1 and 2. This is primarily due to the lack of infrastructure (e.g., roads, fences, vehicle barriers) that facilitate the deterrence and apprehension of illegal trafficking. Controversies regarding military units along the border would still occur with implementation of Alternative 3. The magnitude of this controversy would be reduced somewhat, since engineering support would be eliminated. Engineering support is more visible to the public and typically has greater durations than operational support activities.

4.6.4 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Implementation of Alternative 4 would produce similar socioeconomic effects as described under Alternative 1. Local expenditures and the synergistic multiplier effects would occur as a result of the JTF-6 engineering support projects. Installation of ISIS components would facilitate the detection and deterrence of illegal drug traffickers and combined with infrastructure to assist in preventing and apprehending illegal entrants, the socioeconomic benefits to the region and Nation would be realized. However, a slight reduction in these benefits would occur as a result of the elimination of the JTF-6 operational missions. Aerial reconnaissance missions (manned and unmanned) would not occur under this scenario. These missions are vital to detecting illegal activities (e.g., marijuana crops, methamphetamine laboratories, staging of future smuggling operations). Without such intelligence data, the USBP would be less effective in their apprehension of illegal drug trafficking and more narcotics will enter the United States society. Implementation of Alternative 4 would result in the same controversy, regarding use of military troops, as Alternative 1, however, the controversies would probably be slightly less due to the elimination of operational support activities.

4.6.5 Alternative 5. No Action

The No Action Alternative would have negative impacts on socioeconomic resources. These impacts occur due to the continuation and possible increase of illegal drug smuggling and associated sales and use. Illegal immigration would continue to rise and, consequently, social program costs would experience increases. Implementation of the No Action Alternative would also not provide any economic benefits to local and regional economies that would be derived from construction activities and related expenditures. The No Action Alternative would eliminate the controversy surrounding the use of military troops for support activities along the border.

4.7 CULTURAL RESOURCES

The American southwest is very diverse and rich with prehistoric and historic resources. Consequently, the potential presence of properties eligible for listing on the NRHP is high. INS and JTF-6 provide surveys of all construction sites (temporary and permanent) prior to commencement of construction activities to ensure that significant sites are avoided to the maximum extent practicable. If a site is unavoidable, other mitigation measures, such as data recovery or burial, are implemented with the concurrence of the appropriate State Historic Preservation Office (SHPO), as well as Tribal Governments and BIA, as applicable. By instituting the process of avoidance as the primary procedure, combined with mitigation and monitors during construction activities, INS and JTF-6 actions have resulted in only limited impacts to cultural resources within the study area. Cumulative impacts to these and other resources are discussed later in this chapter. Mitigation programs employed by INS and JTF-6 are described in Chapter 5.

4.7.1 Alternative 1. Full JTF-6 Support to INS, including the ISIS Program

Construction activities that would occur under Alternative 1 would have the highest potential to impact cultural resources. As mentioned above, surveys, performed by professional archeologists, would provide the greatest assurance that sites could be avoided. Other mitigative measures such as construction monitors would provide a second level of protection.

Density of sites vary greatly throughout the southwest depending upon topography, available water sources, available sources for tool-making, and suitable habitat/wildlife populations. However, for comparison purposes, if it is assumed that the average site density is 0.75 site per linear mile of ROW, then Alternative 1 would have the potential to impact about 1,832 cultural resources sites. It should be emphasized that most of the road and fence projects performed by INS and JTF-6 are repair and upgrade projects. Therefore, most of the sites that would be encountered have been previously disturbed.

Subsequent road maintenance activities and routine dragging procedures along drag roads have the potential to affect cultural resources sites. The requesting USBP Sector or Station has the responsibility for maintenance of the road upon completion of the construction/upgrade, and thus responsibility to ensure that sensitive resources, as identified in the NEPA documentation, is not impacted. Similarly, NEPA documentation for drag roads also identify sensitive sites; USBP agents should be aware of these areas and, through consultation with the appropriate Native American Nations, develop procedures to avoid effects to these sites.

On the other hand, the surveys and analysis performed by INS and JTF-6 archeologists significantly add to our knowledge base of the history and prehistory of the southwest. Without these activities and the surveys required by INS/JTF-6, much of this information would never be obtained or would be improperly

recovered by amateur archeologists. This is especially true on private lands where there are no requirements for the landowner to conduct routine surveys.

4.7.2 Alternative 2. Full JTF-6 Support Without Implementation of ISIS Program

Potential impacts to cultural resources under Alternative 2 would be very similar to those described for Alternative 1. The location of proposed construction projects would have to be surveyed for cultural resources prior to construction and, thus, sensitive resources would probably be avoided. Thus the beneficial effects of obtaining knowledge regarding cultural resources would be realized. The extent of the construction sites associated with ISIS components is typically very small. Elimination of this program under Alternative 2 would reduce the chances of affecting cultural resources on less than 60 acres throughout the entire study corridor.

4.7.3 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

If this alternative was implemented, the potential to affect cultural resources would be negligible. Most of the actions which require ground disturbances would be eliminated. Installation of the ISIS facilities could potentially affect sensitive resources; however, the proposed project area would be surveyed prior to construction of the ISIS tower/facility. Since these facilities occupy such small footprints, they could easily be shifted/relocated to avoid disturbances to cultural resource sites.

JTF-6 would continue to provide operational support service to INS entities. LP/OP missions typically produce minimal impacts to historic properties since these are temporarily-used sites that must appear to be undisturbed. Clearing of the area for bivouac areas is prohibited during JTF-6 operational activities. Ground patrol and terrain denial operations are not likely to affect historic properties if bivouac areas are maintained away from historic sites which have foundations and other features. The actual patrolling and reconnaissance field activities would not result in significant adverse cumulative impacts due to the sporadic and short-term nature of these operations. JTF-6 would continue to require that any area subject to ground disturbances be surveyed by professional archeologists prior to implementation of the proposed action. These surveys, combined with archeological monitors when needed, would ensure no significant effects to sensitive resources would occur.

4.7.4 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Potential effects to cultural resources upon implementation of Alternative 4 would be essentially the same as those described for Alternative 1. As discussed in Section 4.5.3.4, operational support actions would be unlikely to result in adverse effects to historic or prehistoric sites and properties. Consequently, elimination of these actions would not create much difference between the two alternatives.

4.7.5 Alternative 5. No Action

Implementation of the No Action Alternative would eliminate any potential to directly affect cultural resources by construction and operational support projects. Indirect effects from erosional forces would continue if road improvements are not accomplished. No additional information regarding the cultural history of the southwest would be obtained by INS or JTF-6.

4.8 CUMULATIVE IMPACTS

This section of the SPEIS addresses the cumulative impacts associated with the JTF-6 support services provided to INS. This analysis considers the impacts that have occurred due to past projects as well as those anticipated for the 5-year period. The discussions are presented for each alternative. The various resources that would be impacted are addressed within each alternative discussion.

The 1994 INS/JTF-6 PEIS estimated that between 1989 and 1994, about 2,400 acres of land had been disturbed by their engineering and operational support activities. The vast majority of this land was comprised of semi-desert scrub and grassland habitats. The PEIS also projected that over 300 miles of road would need to be constructed or improved each year (total of 1,500 miles) between 1994 and 1999. The acreage anticipated to be impacted with this type of construction activity alone was estimated to be over 3,600. Table 4-6 presents the projects that were actually completed during this period. The total number of acres (2,005) impacted for all construction activities is about 55 percent of that projected for the 1994-1999 road projects. However, not all of these projects were completed and some were redesigned during the construction phase, which resulted in fewer acres being impacted. JTF-6 estimates that of the 646 miles of proposed road projects, about 415 (64 percent) were actually completed. This reduction alone would decrease the amount of land/habitat disturbed by approximately 700 acres, thus, the cumulative amount of land impacted by INS and JTF-6 activities since 1989 is 3,705 (2,005 – 700 + 2,400) acres. This amount approximates the projected amount for the past five years alone, which substantiates previous statements regarding these estimates as worst-case scenarios.

It should be noted also that several of the road projects presented in Table 4-6 indicate much less damage per mile of road construction/improvement than was used in the impact analysis presented in previous subsections. For example, the 1996 Otay Mountain Road project impacted about one acre of chamise chaparral habitat, although the road was 25 miles long. This improvement project had very strict limitations to stay within the existing roadbeds due to sensitive biological resources. Again, this supports assumptions that projected impacts presented herein should be considered as worse case scenarios.

Figure 4-1 depicts the number of engineering projects anticipated in 1994 relative to those actually completed during the past five years. As indicated in this figure, the number of road projects estimated to be needed far exceeded the number completed. Training ranges, on the other hand, exceed the number projected to be needed. It should be noted, however, that the majority of the training range projects were expansion to or improvements of existing ranges.

Other construction projects completed during this same time frame included 16 buildings, five dog kennels, and seven lighting projects. While these types of projects were addressed in the 1994 PEIS, their numbers were not projected since it was anticipated that they would comprise a very low percentage of the engineering activities. The numbers of engineering projects depicted in this figure also include engineering design and engineering assessment/feasibility studies. These types of projects do not have impacts on the human or natural environmental and thus are not included in Table 4-6.

Positive cumulative benefits have resulted from INS/JTF-6 activities as well. Additional knowledge regarding numerous threatened or endangered species' locations, distribution, and life requisites has been obtained through surveys and monitoring efforts associated with INS/JTF-6 actions. The INS/JTF-6 activities completed from 1994 to 1999 have provided information on over 100 new cultural resources considered to be potentially eligible for NRHP listing. Erosion has been alleviated on hundreds of miles of road and fences have precluded illegal foot and vehicular traffic through environmentally sensitive areas.

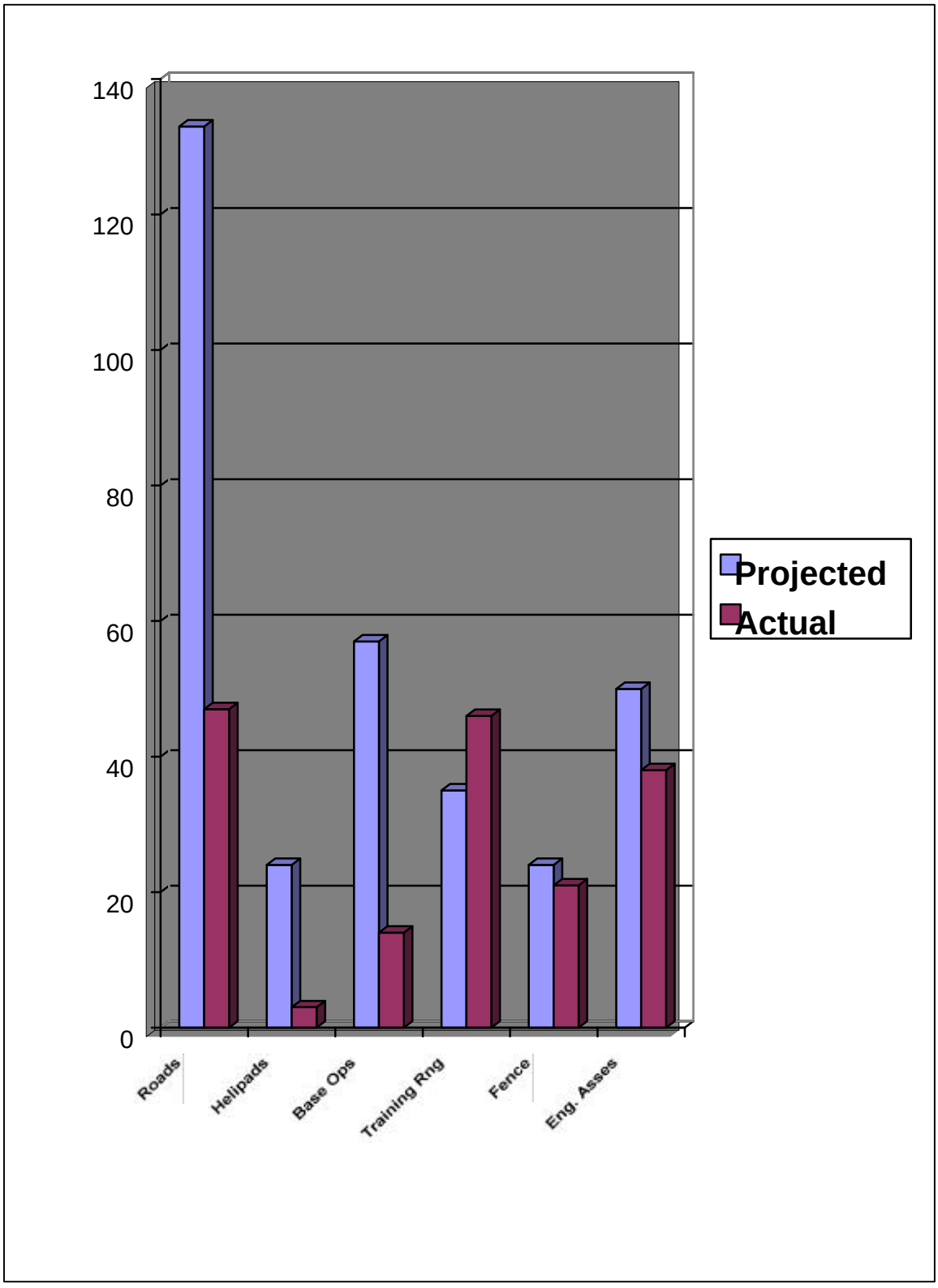

Figure 4-1. Number of JTF-6 Engineering Projects, 1994-1998

Table 4-6 – INS/JTF-6 Projects Evaluated 1994-1999

	No. of Miles			Number of		Total	
JTF-6/INS Project (Year)	Road	Fence	Combined	Lights	RVS	Acres	Vegetation Type
USBP Check Points ('97)						11	Creosote chamise chaparral
Multi-tiered Pilot Fence		2.1				5	Chihuahuan desert scrub; mesquite
Douglas Light Poles ('98)	5			66		5	Scrub
Spring Canyon Fence (1.6 mile) ('98)			1.6			120	Coastal scrub; riparian; desert scrub
San Ysidro Lane Improvements ('98)						1	Developed
Operation Rio Grande ('98-99)	67	9		656	15	220	cropland, riparian, thornscrub
Yuma Lights ('99)						7	Sonoran desert scrublands
Naco Lights ('99)				20		5	Disturbed
San Diego Fence ('99-00)			5.4			327	Coastal scrub, chamise chaparral, saltmarsh
Campo-Jacumba ('94)	28	17				65	Disturbed; Chihuahuan desert scrublands; mesquite creosote; grama grasslands
BORTAC Range ('95)						5	Disturbed; creosote scrub
Otay Mountain Road ('96)	25					1	Chamise chaparral
Multi-agency Weapons Training ('96)						15	Non-native grasslands; disturbed
Tecate-Campo Road ('97)	3					13	chaparral; floodplain; desert scrubland
Naco-Douglas Road ('97)	54	2.5				5	Grassland/scrub
Calexico Fence ('97)		5.75				17	Disturbed
Yuma Fence ('98)			3.3			9	Disturbed
Laredo Roads ('98)	239.8					738	Disturbed grasslands semi-desert
Marfa Road ('98)	91.5					38	Grasslands Chihuahuan desert
Van Horn Road ('99)	130					130	Scrub; oak riparian; creosote-tarbush
Columbus Road ('99)	75					269	Disturbed; sotol-ocotillo
Total	718.3	36.4	10.3	742	15	2005	

Note: NEPA documentation has been completed or is ongoing; construction activities of completed NEPA studies may still be on-going.

Long term indirect cumulative effects have occurred and would continue to occur. However, these effects, both beneficial and adverse, are difficult, if not impossible, to quantify. Reductions in habitat would undoubtedly create inter- and intra-species competition for available food and shelter and, eventually, reductions in some wildlife populations. The increase in lights along the border could also produce some long-term cumulative effects, although the magnitude of these effects in some areas is not presently known. Some species, such as insectivorous bats, may benefit from the concentration of insects that would be attracted to the lights. Circadian rhythms of other diurnal species, however, may be disturbed enough that breeding or feeding patterns are skewed, causing synergistic physiological changes. Increased patrol activities would increase the potential for some wildlife specimens to be accidentally hit and killed. Such losses would not be expected to result in significant reductions to the populations.

Aerial reconnaissance surveys are unlikely to result in deaths, although some mishaps do occasionally occur. Bat roosts, rookeries, raptor eeries, and other such sensitive areas could be impacted if aerial surveys are conducted at low levels or hovering operations are performed nearby. Normal aircraft operations, however, should not produce long-term impacts since most animals would habituate to noises caused by aircraft. Aerial patrols are not expected to increase significantly; thus, increases in noise levels would not be expected to significantly increase. In addition, the USBP is currently in the process of purchasing newer, quieter helicopters which would further reduce any potential for noise concerns (U.S. Army 1999).

The remainder of this section will address the cumulative effects that would be expected to occur upon implementation of each of the alternatives. Cumulative effects will also need to be addressed by each subsequent NEPA document tiered to this SPEIS. This is especially true since regional cumulative impacts can be more significant than these dispersed over such a large project area. For instance, INS is currently in various stages of constructing and planning a border infrastructure project along 14 miles in San Diego County. Direct and indirect effects of this project could alter up to 700 acres of various habitat types. While this amount would be insignificant over the entire SPEIS project corridor, these effects may be considered more significant on a regional basis. It would also need to consider any potential conflict with the Multi Species Conservation Plan (MSCP) that has been prepared for San Diego County (San Diego County, 1998).

4.7.6 Alternative 1. INS Program with Full Support from JTF-6

Since 1989, INS and JTF-6 activities potentially impacted about 3,705 acres (see Table 4-4), primarily due to construction of road and fence projects. These effects combined with the area anticipated to be disturbed over the period 1999-2004 (see Table 2-1) would amount to approximately 10,600 (3,705+6,900) acres. Most of the past disturbances have occurred in Texas (1,148 acres) and New Mexico (280 acres), followed by California (235 acres). The potential future effects from road constructions would be incurred primarily in Texas (4,121 acres) and Arizona (1,015 acres). Future fence projects would affect an additional 225 acres. Again most of this would occur in Texas (109 acres) and California (109 acres). The total amount of land expected to be impacted by INS and JTF-6 for the 15-year period would be approximately 10,700 acres. It should be stressed that these projected estimates are very liberal and probably represent a worst-case scenario. Future projects depend upon several factors including Federal budget constraints, enforcement needs and reactions to changes in criminal modes of operation, and new technologies.

Based on these anticipated projects, the habitat type that has been and would be impacted the most is the Chihuahuan desert scrublands, which is comprised primarily of creosote-mesquite complexes. Wildlife populations would be affected directly by reductions in the available habitat and habitat fragmentation and indirectly by reductions in prey base, increased competition within remaining habitat, and human disturbances. It should be noted, however, that the total amount of land that would be altered represents less than 0.05 percent of the total area within the project study corridor.

Construction of ISIS towers would increase the potential for raptors to be electrocuted or to become entangled in overhead powerlines. Although injuries and deaths to raptors due to collision with powerlines and support (guide) wires do occur, studies have indicated these structures do not present a major problem. The relative infrequency of collisions is due to the high visual acuity of raptors and the large size of transmission line conductors (Raptor Research Foundation, Inc., 1996).

The total amount of wetlands that have been impacted by INS/JTF-6 since 1994 has been less than five acres. Impacts to these valuable habitats were avoided, wherever practicable, which resulted in the very low acreage figure. Each project that could not avoid wetland effects, however, was coordinated through the USACE Section 404 permit process with the appropriate regulatory agencies.

Site densities for cultural resources are relatively high in the southwestern U.S.; consequently, there is a high potential to have cumulative impacts to these sensitive resources if adequate surveys and proper mitigation measures are not provided. Future proposed actions would follow a similar strategy of avoidance of NRHP-eligible properties so that the actions would result in no adverse impacts to historic properties. The proposed action would be coordinated with the appropriate SHPO through the Section 106 review process. INS, JTF-6, or the requesting DLEA will be responsible for any mitigation required for the initial performance of the project as well as that required for associated maintenance activities.

Cultural resources sites that remain within roadways could be impacted over the long term by the continual use of the road. Without proper design and construction of roadbeds and adjacent drainages, intact sites could be subject to increased erosional problems. Rerouting, burial, and buffer zones are measures that would be considered to reduce or eliminate potential effects to these resources. If these measures were deemed impractical, mitigation through data recovery would have to be performed. All mitigation measures would be coordinated through the appropriate SHPO, Tribal Government and land manager.

Other resources, such as soil, water supplies, and air quality, would be impacted for a short term during and immediately after completion of major construction projects. None of these resources would be expected to incur significant cumulative impacts. For example, using the same assumptions presented in section 4.3.1, the total amount of PM_{10} emissions produced during the construction of 415 miles of road would be approximately 430,000 tons. Dispersed over a 2,000-mile corridor and a 5-year period this amount is inconsequential. None of the projects to date have indicated a potential excursion which could violate air quality standards, especially within non-attainment areas. Thus far, no Federal Class I areas have been affected.

Soils that are denuded during construction activities would be vulnerable to erosion. However, the vast majority of the road projects are planned to alleviate soil erosion; thus, the cumulative effect to soils should be beneficial. A reduction in erosional rates would have consequent beneficial results to area surface water quality by reducing turbidity and biochemical oxygen demands.

Direct cumulative impacts on socioeconomics would be insignificant. The magnitude of the effects would depend upon the project costs (i.e. local expenditures) and the economic multipliers in the region. Cumulative indirect effects to socioeconomic resources would be beneficial and significant. The completion of Alternative 1 would allow INS and other DLEAs to more efficiently and effectively detect, deter and apprehend illegal traffickers, thereby reducing social costs associated with property damages, violent crimes, drug treatment and rehabilitation, and entitlement programs.

Indirect increases in traffic and/or vehicular speeds could occur as a result of improvement to roads. The magnitude of these effects would depend upon current traffic conditions, proximity to population centers, and other available transportation corridors. However, based upon observations made after past road

improvement projects, these effects, if any, are expected to be insignificant. Cumulative effects would be addressed in subsequent NEPA documents tiered to this SPEIS.

4.7.7 Alternative 2. Full JTF-6 Support Without Implementation of ISIS Program

The cumulative impacts associated with implementation of this alternative would be very similar to those described for Alternative 1. The primary difference would be the slight reduction in ground disturbances by the elimination of the ISIS facilities. The cumulative effect of these facilities would be less than 100 acres. However, the overall effectiveness of INS' enforcement program could be severely hampered by the lack of additional ISIS capabilities. In turn, this lack of capability could result in more successful illegal entrants with the concomitant increase in social costs, as described above.

4.7.8 Alternative 3. JTF-6 Operational Support Only and Implementation of the ISIS Program

This alternative would essentially maintain the impacts that have occurred as status quo. That is, INS activities would increase the total amount of acreage to be impacted by approximately 90 acres to a total of about 2,100 acres. Habitats and the wildlife they support would incur negligible cumulative effects. Although soils would not be directly disturbed, soil erosion would continue, possibly to the point that the cumulative effects would become significant. Socioeconomic effects would be similar to those described for Alternative 1, although at a much greater magnitude. Local economic benefits from project expenditures would not be realized. The effectiveness of INS and other DLEAs to patrol most of the area would be hindered, thus allowing the level of illegal trafficking and its synergistic adverse effects to continue to rise.

4.7.9 Alternative 4. JTF-6 Engineering and General Support Only and Implementation of the ISIS Program

Cumulative effects of implementing Alternative 4 would be similar to those described by Alternative 1. Elimination of the JTF-6 operational support activities would result in less synergistic and cumulative effects. Although quantification of these effects can not be made at the present (operational support actions are identified on an as-needed basis), it would be expected that the reduction in potential impacts would be inconsequential.

4.8 RELATIONSHIP BETWEEN LOCAL AND SHORT-TERM USE OF SOCIETY'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM ENVIRONMENTAL PRODUCTIVITY

Benefits derived from the control of illegal entrants and narcotics trafficking into the U.S. and the adverse impacts associated with the construction activities necessary to accomplish this control represent trade-offs between the local, short-term use and the long-term stability and productivity of society's environment. The proposed action would reduce the flow of illegal drugs and entrants to the U.S. and consequently, reduce the social costs associated with managing these issues. Short-term local adverse direct effects resulting from habitat disturbances would be off-set by long-term regional benefits including protection from illegal vehicle and foot traffic, accidental fires caused by illegal entrants, and illegal poaching.

The proposed action would require the conversion of about 6,900 acres of mostly desert scrub-shrubland habitat to dirt or gravel roads, parking areas, and buildings. The long-term productivity of these lands would be lost over the life of the site-specific projects. INS and JTF-6 make every attempt practicable to avoid disturbances to valuable fish and wildlife habitat by using previously disturbed sites where possible.

Compensation for these losses, if required, would be coordinated through the appropriate state and Federal resource agencies, as described in Chapter 5.

4.9 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES INVOLVED IN IMPLEMENTATION OF THE PROPOSED ACTION

The proposed action would result in the permanent conversion or loss of about 6,900 acres of various habitats, mostly desert scrub-shrublands, to denuded or developed lands. The majority of these losses would be due to construction of roads and fences. The proposed action would also require the irretrievable commitment of fuel, labor, building materials, and monetary resources.

SECTION 5.0
MITIGATION

5.0 MITIGATION

This chapter describes those measures which could be implemented to reduce or eliminate potential adverse impacts to the human and natural environment. Many of these measures have been incorporated as standard operating procedures for INS and JTF-6 based on previous experience. The mitigation measures are presented for each resource category that could be potentially affected. It should be emphasized that these are general mitigation measures; development of specific mitigation measures would be required for each future action. Mitigation measures would also include evaluation of implementation of the alternatives recommended for each type of support activity presented in Sections 2.1.1 through 2.1.2.8. These measures would be developed during the conduct and preparation of individual, project-specific NEPA documents tiered to this SPEIS. The proposed mitigation measures would be coordinated through the appropriate agencies and land managers/administrators.

After action reviews would be performed at the request of the land administrator or INS/USBP. Significant problems identified during this review will be reported to the appropriate agencies and corrective actions will be implemented immediately. Measures to be implemented during subsequent operations, to avoid such problems, would be identified. Reports documenting these revisions would be forwarded to the appropriate Federal and state agencies for their information, if requested.

5.1 SOILS

Vehicular traffic associated with engineering and operational support activities should remain on established roads to the maximum extent practicable. For road and fence construction projects, previously disturbed routes and/or locations would be utilized to the maximum extent practicable to reduce the soil disturbances. Areas with highly erodible soils would be given special consideration when designing the proposed facility to ensure incorporation of various compaction techniques, aggregate materials, wetting compounds, and revegetation to ameliorate the subsequent soil erosion. Erosion control measures such as waterbars, gabions, haybales, and reseeding would be implemented during and after construction activities in accordance with the SWPPP. Revegetation efforts may be needed to ensure long-term recovery of the area and to prevent significant soil erosion problems. Native seeds and plants should be used if revegetation efforts are deemed necessary. Where possible, use of native plants that would assist in the conservation and enhancement of protected species would be considered, as required by Section 7(a)(1) of the ESA. Borrow materials, if required, would be obtained from established borrow pits or from approved on-site sources. Approval of new borrow pits would be requested from the appropriate Federal (e.g., BLM, BOR, etc.) and state agencies on a project-by-project basis. If bivouac and TOC sites are required, these sites should be located within areas that have been previously disturbed to avoid additional soil disturbances. Installation of soakage or evaporation pits and field latrines would be kept to a minimum for each bivouac site.

5.2 AIR QUALITY

Proper and routine maintenance of all vehicles, generators, aircraft and other equipment would be implemented to ensure that air emissions are within the design standards of the piece of equipment. Construction activities within non-attainment areas would be coordinated with the appropriate environmental agency(s) to ensure that the emissions would conform with regulations specified in the Clean Air Act. Construction sites within urban areas, along major transportation routes, or in biologically sensitive areas (e.g., wildlife refuges) would be kept wet, to the extent practicable, to reduce fugitive dust problems. If bivouac or TOC sites are required, generators and other similar field equipment would be kept to the

minimum required. Where practicable, drop lines from local electrical systems would be used as a substitute for generators.

5.3 WATER RESOURCES

Each proposed construction project that affects greater than five acres (one acre after February 2002) will require a SWPPP as part of the National Discharge Elimination System (NPDES) permit process. Similarly, if wetlands or waters of the U.S. are expected to be affected, early coordination by INS, JTF-6 or the requesting USBP Sector/Station with the appropriate USACE district and state agencies will be conducted and the applicable Section 404 permit process completed prior to initiation of the construction activities.

No action will be initiated that may affect wetlands and floodplains without performing the requisite analysis and findings specified by Executive Order 11990 and 11988 respectively, prior to taking any action. Field latrines and soakage pits would be used only when necessary and would be installed in strict accordance with state and local regulations. Storage or staging sites would be located at least 0.25 miles from wildlife and livestock tanks or other permanent surface water bodies to reduce potential effects of accidental spills. Conservation measures would be implemented to preclude unnecessary waste of water supplies. Discharges of gray water and other wastes to drainages or other water courses/bodies is prohibited. Portable latrines, provided and maintained by licensed contractors, would be used to the extent practicable during construction and operational support activities.

5.4 BIOLOGICAL RESOURCES

Professional biologists would be utilized to perform field surveys of major construction sites as early as possible in the planning and design stages in order to avoid environmentally sensitive resources. These surveys will be coordinated through the appropriate Federal and state agencies. All areas which are known to support threatened or endangered species would be considered off limits to avoid impacts to these resources. If possible, construction activities would be scheduled at times when they are least likely to disturb breeding and nesting activities. Additionally, INS and JTF-6 would attempt to minimize losses to vegetation by: (1) trimming vegetation along roadsides rather than removing the entire plant, (2) require heavy equipment to utilize road pullouts or other such disturbed areas, and (3) consider the possibility of revegetative efforts. As mentioned in Section 5.1, native seeds or plants which are compatible with the enhancement of protected species should be used to the extent feasible, as required under Section 7(a)(1) of the ESA. When possible, communication equipment will be constructed in locations where preexisting towers are located. Disturbed sites or sites with low quality habitat would be utilized to the maximum extent practicable for construction and operational support activities.

The Migratory Bird Treaty Act (MBTA) requires strict coordination for construction activities scheduled during nesting seasons (March through August). Surveys would have to be performed to identify active nests, which would have to be avoided. Any incidental take of a bird species protected by the MBTA would have to be immediately reported. Another mitigation measure that would be considered is to schedule all construction activities outside the nesting season (September through February).

Sensitive habitats such as caves, riparian communities, parks, refuges, wilderness areas, scenic streams and native old-growth communities would be avoided to the maximum extent practicable. Any unavoidable effects to such communities shall be closely coordinated with the appropriate Federal and/or state agency(s) to ensure that such impacts are kept to an absolute minimum and that restoration actions are considered and implemented, where plausible.

Environmental design features which should be considered, especially in areas that support protected species, include the development of vegetation corridors to avoid habitat fragmentation and the proper placement and size of culverts to adequately convey stormwater and allow wildlife to safely cross roads. Helipads should be located at previously disturbed sites, such as existing runways and airports to the extent practicable. Low level overflights and hovering would avoid breeding or nesting areas during breeding/nesting seasons; such activities would not occur during nighttime operations either. Project specific mitigation plans would be required for projects with potential to cause substantial impacts to wildlife habitat or to impact protected species or other environmentally sensitive resources; these plans will be closely coordinated with, and approved by, the USFWS and appropriate state resource agency(s) prior to initiation of construction. It is the policy of INS and JTF-6, however, to mitigate adverse impacts through the sequence of avoidance, minimization, and finally, compensation. Compensation varies and includes activities such as restoration of habitat in other areas, acquisition of lands, etc. and is coordinated with the USFWS and appropriate state resource agencies.

Prior to implementation of activities within the coastal zone of the Gulf of Mexico and Pacific Ocean, INS, JTF-6 or the requesting USBP Sector/Station will obtain a coastal zone consistency determination from the state of Texas and California, respectively, as required by the Coastal Zone Management Act.

Military units shall not be allowed to use pyrotechnics except in approved firing ranges and within approved areas on military installations. Any military unit participating in a JTF-6 project would be instructed in procedures for immediate notification of the appropriate agency(s) concerning wildfires.

5.5 SOCIOECONOMICS

While the use of military troops along the border will remain controversial, the most controversial type of support activities are operational support actions such as terrain denial. As indicated on page 1-12, terrain denial missions have not been provided since 1995, and any new requests for such missions will require SECDEF approval.

5.6 CULTURAL RESOURCES

Potential adverse impacts to historic properties have been mitigated through a policy of site avoidance. The continuation of a program of archeological survey and monitoring for INS and JTF-6 activities with the potential for ground disturbances would ensure that cultural resources that are deemed to be potentially eligible for NRHP listing would be avoided; consequently, such activities would have no effect on historic properties. Surveys and monitoring on Native American Nation properties would be performed in conjunction with and upon approval of the appropriate Indian Tribal Government. The requesting INS entity will be responsible for coordinating with the respective SHPO for maintenance activities involving earth moving operations in areas where historic properties have been previously identified. This coordination is necessary to ensure mitigation measures are implemented. Mitigation measures that could be used, when approved by the appropriate SHPO, to preclude impacts include, but are not limited to, data recovery, burial of the site with gravel or other aggregates, and use of professional archeologists as monitors during the maintenance operations.

All construction activities shall be at least two feet away from the international boundary to avoid impacts to historical boundary monuments and other demarcations. Near each permanent boundary monument, strict construction precautions would be implemented to avoid potential damage to these items. Additionally, no construction materials would be placed adjacent to these monuments.

If building demolition or renovation is proposed to be performed on a building that is greater than 50 years old, INS or JTF-6 will consult with the respective SHPO regarding eligibility and effect pursuant to 36 CFR Part 800.

SECTION 6.0
PUBLIC INVOLVEMENT

6.0 PUBLIC INVOLVEMENT

6.1 GENERAL

The public involvement program for this project involved ten public scoping meetings, one Federal and state resource agency scoping meeting and extensive coordination with various agencies throughout the preparation of the SPEIS. In addition a public review process for the original draft and revised draft documents have been incorporated to the project schedule, as required by NEPA and CEQ Regulations for Implementation of NEPA.

6.2 PUBLIC SCOPING MEETINGS

A Notice of Intent (NOI) to prepare a Draft SPEIS for INS and JTF-6 activities was published in the *Federal Register* on 28 August 1998 (Appendix A). The NOI provided project background, pertinent contact addresses, and a summary of the project. The NOI also announced that public scoping meetings would be conducted to allow public input to the NEPA review process/documentation. Legal advertisements were placed in local newspapers of the selected meeting locations prior to the meeting dates. The ten public scoping meetings were held at the following locations:

DATE	CITY	STATE
14 September 1998	Deming	New Mexico
15 September 1998	El Paso	Texas
17 September 1998	Marfa	Texas
06 October 1998	Sierra Vista	Arizona
08 October 1998	Yuma	Arizona
20 October 1998	El Centro	California
22 October 1998	San Diego	California
02 November1998	McAllen	Texas
03 November 1998	Laredo	Texas
05 November 1998	Del Rio	Texas

A brief description of INS and JTF 6 activities and procedures as well as the NEPA process was presented at the beginning of each meeting. The floor was then opened for oral and written statements, concerns, and comments. All proceedings were recorded by a certified court reporter, and transcripts are available for review at the Fort Worth District, Corps of Engineers office. The verbatim transcripts of each scoping meeting were included in the Draft SPEIS, but are not included in this Final SPEIS document.

6.3 RESPONSES TO ISSUES

Some issues raised during the scoping process cannot or should not be addressed in an EIS. For instance, concern about the time frame or size of the SPEIS can only be resolved through completion of the actual document. Other issues that concern congressional authority or mandates are also outside of the scope of

this SPEIS. The following paragraphs describe the applicable issues and where each is discussed within the SPEIS.

Impacts to soils, including indirect effects from erosion, is discussed in sections 4.1, 4.8 and 5.1 of the Draft SPEIS. These sections also discuss road construction techniques relative to soil properties, including the use of existing routes. The potential of road construction/upgrading to encourage or increase poaching and trespass problems is addressed in Section 4.5.1.

Several comments were made concerning the need to preserve and protect sensitive natural resources. Such resources are discussed throughout Chapter 3 and in detail in the Environmental Baseline Documents; the potential impacts to these resources and mitigation measures to alleviate impacts are addressed in Sections 4.5.1 and 4.5.3 as well as Chapter 5. Potential impacts to protected species are discussed in Section 4.5.3, while impacts to general wildlife populations are discussed in Section 4.5.2. These impact discussions include an evaluation of fences acting as barriers to wildlife movements, lighting, soil erosion, and wildfires on wildlife and their habitats.

Discussions regarding potential effects to cultural resources are presented in Section 4.7. Section 4.8 is dedicated entirely to cumulative effects.

6.4 SUMMARY OF PUBLIC COMMENTS ON THE DRAFT SPEIS

The original Draft SPEIS was submitted to the general public and affected Federal and state agencies for review and comment. Notification of the public release of the draft was published in the *Federal Register* and in local and regional newspapers along the border. Copies of these notices are included in Appendix A. A total of 13 letters from 12 different Federal and state agencies and private organizations were received regarding the original Draft SPEIS. The Arizona Game and Fish Department elected to send in two separate letters. Copies of these letters as well as the responses from INS and JTF-6 to these comments were supplied in the Revised Draft. The following paragraphs summarize some of the more salient and/or frequent comments received, and a general response.

There were several comments regarding the lack of specific project descriptions. As noted in the original Draft SPEIS and iterated in our responses within the Revised Draft SPEIS, this document uses a programmatic approach to disclose the types of projects expected to occur over the 5-year period along the U.S./Mexico border area. As such, no specific projects or project locations have been or can be identified at the present time. However, the SPEIS does provide an indication of the magnitude of construction projects anticipated within this period, by state. Once a project need is identified, the planning team will initiate NEPA documentation procedures, including coordination with all appropriate agencies and land managers, to prepare a site-specific NEPA document tiered to this SPEIS.

In addition, the NEPA team felt that the scope of the original Draft SPEIS was so broad (covering independent activities of two Federal agencies), that the document caused confusion among the general public. Consequently, the NEPA team decided to refocus the scope of the SPEIS to address just the support provided by JTF-6 to INS and the ISIS program within the 50-mile corridor and to resubmit the revised Draft SPEIS to the public for review.

Several comments were also made regarding the perceived lack of coordination with Federal and state environmental agencies. As discussed in the responses to these comments, INS and JTF-6, as standard operating procedures, routinely coordinate with the appropriate agencies throughout the planning process. For most projects, this coordination includes a minimum of three different times at which INS or JTF-6 will contact applicable Federal and state agencies.

Another frequent concern focused on potential effects to threatened or endangered species. As discussed in the SPEIS, only three incidents in the 10-year history of JTF-6 have occurred which adversely affected threatened or endangered species. Each of these incidents were immediately reported to the proper authorities and compensation plans were coordinated through the USFWS and/or state natural resource agency.

6.5 SUMMARY OF PUBLIC COMMENTS ON THE REVISED DRAFT SPEIS

The Revised Draft SPEIS was released for public review in August 2000. Copies of the Notices of Availability are included in Appendix A. The review period was extended until 13 November 2000. A total of 19 comment letters were received, including five from state resource agencies, four from Federal resource agencies, and five from non-governmental organizations.

Several of the comments iterated concerns about the potential to affect sensitive resources, especially protected species and INS/JTF-6 need to coordinate with state and Federal resource agencies. As discussed in the responses to these comments and in previous versions of the SPEIS, INS and JTF-6, as standard operating procedures, coordinate with the appropriate agencies throughout the planning process. Site specific surveys are performed by professional biologists and archeologists to attempt to avoid sensitive resources and, at least, to ensure minimal impacts.

Another common comment was the perceived lack of detailed analyses contained in the SPEIS. INS and JTF-6 acknowledge that detailed information is not contained in the document regarding all potential projects that might arise along the US/Mexico border. The intent of the SPEIS is to disclose the overall picture of the potential support program and the associated types of impacts that could be expected. Site-specific documents shall be prepared when project needs and designs are identified and formulated. The detailed analyses will be contained in these documents. Furthermore, INS is preparing other sector-wide programmatic NEPA documents that will provide more detail on a regional basis.

Comments regarding the complete cessation of USBP activities and/or support from JTF-6 were presented. However, cessation of these actions would require Congressional approval or mandates and thus were not addressed in the Final SPEIS as viable alternatives.

United States Department of the Interior

BUREAU OF RECLAMATION
Yuma Area Office
P.O. Box D
Yuma, Arizona 85366

IN REPLY REFER TO:

YAO-2240
ENV-1.10

NOV 14 2000

Mr. Eric Verwers
Immigration and Naturalization
Service
Attention: CESWF-PM-INS
P.O. Box 17300
Fort Worth TX 76102-0300

Subject: Revised Draft Supplemental Programmatic Environmental Impact Statement (DEIS) for Immigration and Naturalization Service and Joint Task Force-6 (JTF-6) Activities Along the United States/Mexico Border

Dear Mr. Verwers:

Thank you for providing Reclamation's, Yuma Area Office (YAO) a copy of the DEIS for review. YAO is concerned with two Federally-listed endangered species, the Yuma Clapper Rail (*Rallus longirostris yumanensis*) and Southwestern Willow Flycatcher (*Empidonax traillii extiuma*). Both of these endangered species utilize the Colorado River riparian habitat within your proposed Arizona/California JTF-6 operational area. Also within the proposed area for JTF-6 operations, the Flat-tailed Horned Lizard (*Phynosoma mcallii*), a species of special concern, has management areas that have been created to protect the species. Effects to these three species should be addressed within the DEIS.

BOR-1.

The Final SPEIS has been revised to include clarification of the purpose, cope and intent of a programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Given the geographic scope and programmatic nature of the SPEIS, it is impossible to identify the potential impacts within a specific location. INS/USBP and JTF-6 will coordinate with the appropriate land manager (e.g., BOR), the USFWS and other appropriate state agencies during the planning process to document whether a specific project may affect a listed species. If such a determination is made, INS/USBP and/or JTF-6 will modify the project to avoid potentially impacting a listed species and/or enter into formal Section 7 consultation and submit a Biological Assessment, as required by the ESA.

The following "Unique or Sensitive Areas" need to be included within the DEIS.

1. Southwestern Willow Flycatcher habitat along the Colorado River (Map 1)
2. Yuma Clapper Rail habitat along the Colorado River (Map 2)
3. Grand Desierto Area of Critical Environmental Concern (Map 3)
4. Tinajas Altas Area of Critical Environmental Concern

BOR-2.

The Final SPEIS has been revised accordingly. An errata sheet for Volume 4.

5. Mohawk Area of Critical Environmental Concern (Map 3)

6. The Flat-tailed Horned Lizard Management Areas (Maps 4-12)

YAO has a responsibility of managing Flat-tailed Horned Lizard habitat within the Yuma Desert Management Area (Map 12). The Flat-tailed Horned Lizard was proposed by the United States Fish and Wildlife Service (USFWS) for Federal listing as a threatened species in 1993. Reclamation and eight other Federal and state agencies signed a conservation agreement in June 1997 with the objective of maintaining viable populations of lizards in five management areas in California and Arizona. Due to the management agreement, the proposed rule to list the species was withdrawn in July 1997.

Per the Flat-tailed Horned Lizard Rangewide Management Strategy, "compensation shall be required to offset the residual effects of projects affecting Flat-tailed Horned Lizard habitat." The current Border Patrol activities within the area are traveling off road throughout the YAO Management Area. The USFWS has complained about these numerous excursions into the YAO Management Area.

BOR-3. Currently, INS/USBP has initiated efforts in its McAllen (Texas) and Tucson and Yuma (Arizona) Sectors to prepare sector-wide programmatic EISs to address INS/USBP operations and infrastructure projects as projects are identified in the remaining sectors, additional NEPA analysis will be performed. The Tucson/Yuma Sector PEIS is expected to discuss such impacts from operational activities like off-road enforcement actions. These PEISs will serve as companion documents to this SPEIS, but would provide a more focused environmental analysis within a more defined geographic area.

All off-road activities in the area should be limited to specifically life-threatening events. There are several existing roads that can be utilized for linewatch operations and tracking exercises to preclude future random off road activities within the established Flat-tailed Horned Lizard Management Areas. If continued off-road damage occurs within the YAO Management Area, the species may be significantly affected. To prevent the future listing of the species, mitigation measures specifically compensation for the loss of Flat-tailed Horned Lizard habitat may be required.

BOR-4. All USBP agents receive environmental sensitivity briefings however, due to the remote nature of the southwestern US, particularly southern Arizona, it is virtually impossible to gain and maintain control of the border region without some off-road activities. USBP agents make every attempt to apprehend illegal immigrants and drug smugglers along existing roads, which enhances the health and safety of the illegal entrants, and USBP agents and reduces the repair and maintenance costs of USBP vehicles; however, off-road activities are oftentimes a necessity. The Tucson/Yuma Sector PEIS is expected to discuss such impacts from operational activities like off-road enforcement actions.

If you have any questions or need further information, please contact Ms. Chris Bates at 520-343-8266.

Sincerely,

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November 13, 2000

VIA FACSIMILE AND OVERNIGHT MAIL
Eric W. Verwers
Immigration and Naturalization Service
A/E Resource Center
Attention: CESWF-PM-INS
819 Taylor Street, Room 3A28
Fort Worth, Texas 76102-0300

Re: Revised Draft Supplemental Programmatic Environmental Impact Statement for INS and JTF-6 Activities Along the U.S./Mexico Border

Dear Mr. Verwers:

On behalf of the Lone Star Chapter of the Sierra Club (Sierra Club) and Frontera Audubon Society (Frontera), we are writing to provide comments on the U.S. Army Corps of Engineers' July 2000 Revised Draft of the Supplemental Programmatic Environmental Impact Statement for both INS and JTF-6 activities in southern Texas, New Mexico, Arizona, and California (SPEIS). As detailed below, the Sierra Club and Frontera request that INS and JTF-6 adopt the "no action" alternative considered in the SPEIS. Alternatively, Sierra Club and Frontera request that the agencies choose an option which utilizes those technologies which are least intrusive -- i.e., remote cameras and ground sensors -- while foregoing the many other aspects of this program which are incredibly detrimental to the wildlife and aesthetic values of our border region. At the very least, however, if the agencies intend to move forward with the engineering and operational support measures outlined in this SPEIS, either the SPEIS must once again be revised to adequately address such critical issues as cumulative impacts and appropriate alternatives, or, in the alternative, the site specific NEPA documentation to be prepared for discrete projects must themselves grapple with these issues in a thorough manner, since, at present, such actions may not legally be tiered to this inadequate SPEIS.

M&G-1. Thank you for your comment.

M&G-2. The INS have addressed its broad policy goals in this PEIS. As such, INS is in the process of considering impacts on all past, present, and reasonably foreseeable impacts as required by CEQ40CFR 1508.7. (cumulative impacts) We are currently preparing Sector specific PEIS's in McAllen, Tucson, and Yuma Sector that address proposed operational infrastructure projects. As projects are identified in the remaining Sectors, additional NEPA analysis will be prepared. At this time, INS will consider all reasonable alternatives.

BACKGROUND

For the past decade, the Immigration and Naturalization Service (INS) and Joint-Task Force 6 (JTF-6) have been involved in a massive militarization of the southwest border of the United States. While the stated rationale for this effort is to reduce illegal immigration and stem the drug trade, it is less than clear whether these activities will accomplish this result. Indeed, the

M&G-3. Thank you for your comment.

General Accounting Office (GAO) has explained to Congress that "available data do not yet answer the fundamental question of how effective" these efforts "have been in preventing and deterring illegal entry." GAO, Illegal Immigration: Status of Southwest Border Strategy Implementation (May 1999) at 2. At the same time, however, it is clear that these efforts have had, and will continue to have, serious adverse impacts on the environment.

M&G-3. cont.

Assuming the agencies are intent on proceeding with these projects despite these adverse impacts, the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, et seq., requires that they properly analyze those impacts, as well as alternatives which might have less of an impact. In particular, NEPA, our nation's "basic national charter for protection of the environment," 40 C.F.R. § 1500.1, requires that the agencies must address: (1) the "environmental impact of the proposed action," (2) any "adverse environmental effects which cannot be avoided . . .;" (3) reasonable alternatives to the proposed action, and (4) the "irreversible or irretrievable commitment of resources" involved in implementing the proposal. 42 U.S.C. § 4332. Moreover, the Council on Environmental Quality (CEQ) regulations implementing NEPA require that in undertaking this analysis the agencies must consider the direct, indirect, and cumulative impacts of these activities. 40 C.F.R. § 1508.8. Cumulative impacts analysis requires that the agencies consider the impacts of their own actions "when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." Id. § 1508.7. As explained below, thus far the agencies have not complied with these obligations in this SPEIS.

M&G-4. INS & JTF-6 have analyzed, in a programmatic nature, all reasonable alternatives that will satisfy the purpose and need of the proposed action. In fact, this SPEIS provides more detailed analysis, since more information is now available, than the original PEIS, which was selected by CEQ as the best Federal programmatic NEPA document in 1994. Regarding, cumulative effects, INS/JTF-6 have committed to continue to fully address all past, present and reasonably foreseeable future actions within site-specific NEPA documents that can provide a more meaningful and accurate evaluation of cumulative effects. The INS and JTF-6 are committed to exploring appropriate mitigation measures. INS and JTF-6 have already incorporated mitigation measures into their standard operating procedures. As more Sector or site specific NEPA analysis is performed, additionally mitigation measures will be considered.

DISCUSSION

A. The Agencies Are Illegally Implementing Their Actions Prior To Completing This SPEIS, Completing Site-Specific NEPA Documentation, Or Coming Into Compliance With Other Federal Laws.

NEPA regulations require that agencies may not implement actions which either "[h]ave an adverse environmental impact, or "[l]imit the choice of reasonable alternatives" until after the impacts of such actions have been appropriately analyzed. 40 C.F.R. § 1506.1(a). However, time and again INS and JTF-6 have been implementing aspects of the southwest border strategy discussed in this SPEIS without first complying with NEPA.

M&G-5. With the exception of parts of the Operation Rio Grande, all other projects initiated by INS have undergone the proper NEPA analysis. As part of the settlement of the Operation Rio Grande litigation, INS has initiated preparation of an EIS and other project specific natural resources studies.

For example, the agencies have been engaging in a number of activities in Southwestern Arizona, including road maintenance, drag roads, and low-level helicopter flights and refueling. However, it was not until recently that the agencies even began preparing an Environmental Assessment (EA) on these activities. Given the adverse impacts of these activities, and, in particular, the adverse impacts on the critically imperilled Sonoran Pronghorn, it is plainly inconsistent with NEPA for the agencies to implement these actions without first analyzing these impacts as required by NEPA.

M&G-6. JTF-6 and INS prepared the original PEIS in 1994; this PEIS updates and supplements the 1994 PEIS. INS and JTF-6 have prepared site-specific NEPA documents, tiered to the 1994 PEIS, for all projects in Arizona. In addition, INS prepared a Biological Assessment and received a Biological Opinion from the US Fish and Wildlife Service in October 2000 regarding the potential effects of INS and USBP activities on the Sonoran Pronghorn. The BO, in summary, indicated that these activities may affect, but not adversely affect, the Sonoran Pronghorn.

The implementation of Operation Rio Grande in south Texas is another vivid demonstration of this problem. Before even completing a draft EA on this massive project, the agencies had installed 50 miles of stadium lighting in important wildlife habitat, including

M&G-7. The Final SPEIS has been revised to include a more in-depth statement of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally considers the broad policy and goals of the agency. Subsequent EAs/EISs will be tiered from the PEIS and will include more in-depth site specific analysis. The types of construction activities that were included in Operation Rio Grande had been addressed in the original 1994 PEIS and site specific analysis was performed as per the settlement agreement in Defenders of Wildlife v. Mindner. See also response M&G-6 above.

portions of the Lower Rio Grande National Wildlife Refuge. Only after Sierra Club, Frontera and others brought suit, see Defenders of Wildlife v. Meissner, No. 99-2262 (D.D.C.) (JR), did the agencies even commit to preparing an Environmental Impact Statement (EIS) on the Operation, which, in addition to this lighting, will include boat ramps, fences and other intrusions. In short, to comply with NEPA, and to fulfill the statute's purpose to analyze the environmental impacts of, and alternatives to, agency actions before those actions are taken, the INS and JTF-6 must ensure that they fulfill their NEPA obligations before they implement any aspect of the activities mentioned in this SPEIS. As discussed below, those obligations can only be fulfilled by adequately and comprehensively evaluating those impacts in site-specific NEPA documents which are not tiered to this SPEIS, or by tiering to a significantly revised SPEIS which itself complies with NEPA.

M&G-7. Cont.

The agencies are engaging in a similar pattern with respect to other federal laws, such as the Endangered Species Act (ESA), 16 U.S.C. § 1531, et seq., and the Migratory Bird Treaty Act (MBTA). 16 U.S.C. §§ 703-712. Thus, for example, despite the impacts of these activities in Arizona on the Sonoran Pronghorn, and in Texas on the federally protected ocelot and jaguarundi, the agencies are impacting these species before having completed formal consultation under Section 7(a)(2) of the ESA, which requires that they "insure" that their activities are "not likely to jeopardize" federally protected species. 16 U.S.C. § 1536(a)(2). Similarly, although the INS is apparently under the misconception that federal permits are not required in order to harm or kill birds protected under the MBTA, see SPEIS at 5-3, in fact such permits are required. See Humane Society of the United States v. Glickman, 217 F.3d 882 (D.C. Cir. 2000).[1]

M&G-8.

Surveys are performed prior to initiation of construction to identify the presence of migrant birds and suitable nesting habitat. INS and JTF-6 coordinate with the US Fish and Wildlife Service and appropriate state resource agencies during the planning of all construction projects in an attempt to avoid impacts to listed species. If a project cannot be modified to avoid potential effects to a listed species, INS and JTF-6 would (and have) entered into formal Section 7 consultation with the US Fish and Wildlife Service. The Final SPEIS has been revised to reflect the USFWS Directors Order No. 131 and the EO-11629 issued on 10 January 2001, since these are recent changes to the MBTA regulations that were made after the Revised Draft SPEIS was released.

B. The SPEIS Does Not Properly Consider The Impacts of JTF-6 and INS Activities, Including The Cumulative Impacts Of These Activities.

The SPEIS does not meaningfully analyze the environmental impacts of the activities discussed. To be useful, the SPEIS must specifically address those impacts in each of the areas where these activities will occur, or, if subsequent NEPA documentation will provide that detail, it must, at the very least, meaningfully evaluate the cumulative impacts of these activities throughout the border. If, as the SPEIS suggests, it is not clear what activities will be proposed, then perhaps it would simply be too early to undertake this NEPA analysis. However, since most of these activities are already occurring, there is simply no reasons to agencies cannot undertake the appropriate analysis of impacts, and cumulative impacts, at this point, as the Department of Interior has itself suggested. See DOI Comments at 10 ("Although cumulative impacts may be somewhat difficult to describe and quantify, it should be possible to quantify impacts that have occurred as a result of the 1994 Programmatic EIS . . . .").

M&G-9.

The Final SPEIS has been revised to include a more in-depth statement of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Given the geographic scope and programmatic nature of the SPEIS. The INS air force form more in-depth environmental analysis in subsequent site specific NEPA documents.

INS makes every attempt to be proactive in its planning, but must also be somewhat reactive to changes in the smugglers and illegal immigrants modes of operation. The INS has performed cumulative effects analysis of all known Federal and non-Federal entities based upon our knowledge of all current procedures. The INS/JTF-6 instead have committed to fully address all past, present and reasonably foreseeable future actions within site-specific NEPA documents that can provide a more meaningful and accurate evaluation of cumulative effects. The number and types of activities that are expected over the entire border region have been identified. INS has initiated efforts in its McAllen (Texas-Operation Rio Grande EIS) and Tucson and Yuma (Arizona) sectors to prepare sector-wide programmatic EISs to address INS/USBP operations and infrastructure projects. These will serve as companion documents to this SPEIS, but would provide a more focused environmental analysis within a more defined geographic area. The infrastructure projects addressed in these documents will be those expected to be completed by JTF-6 units, USBP personnel, General Services Administration, and private contractors.

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[1] As the Department of Interior noted in their comments on the initial draft SPEIS, the agencies must also consult with the Fish and Wildlife Service regarding their affirmative conservation obligations under Section 7(a)(1) of the ESA, 16 U.S.C. § 1536(a)(1). See SPEIS, Appendix B, May 18, 1999 Department of Interior Comments on SPEIS (DOI Comments), at 3 ("we recommend immediate initiation of the section 7(a)(1) consultation process").

For example, in response to DOI's comments, the SPEIS states that lighting will not have adverse impacts on wildlife. See SPEIS Appendix B, at 9 ("with proper placement and direction, no impacts to the endangered species should occur"). However, elsewhere the SPEIS concedes that, at the very least, those impacts require further study. SPEIS at 4-18. In fact, particularly with regard to endangered nocturnal cats such as ocelots and jaguarundis, it is clear that lights do adversely impact them. See, e.g., Defenders of Wildlife Comments attached to SPEIS. Yet, nowhere does the SPEIS discuss those impacts, or alternatives which would ameliorate those impacts with respect to not only federally protected species, but many other aspects of the environment as well -- from birds and insects, to plants, to the aesthetic harm that this light pollution causes.[3]

There are many other examples of impacts not adequately considered, including:

1. noise impacts, from low-flying helicopters, boats, light generators and other equipment. While some of these impacts are briefly mentioned, see SPEIS at 4-7, the actual impacts are not analyzed, nor are cumulative impacts considered.

2. barrier impacts, such as fences, roads and other obstructions. As DOI's comments explain, especially where these obstructions are installed close to highly populated areas, existing obstacles already make it "difficult for secretive wildlife like the endangered ocelots to disperse," and thus additional obstacles "have a significant cumulative impact on such species movements." DOI Comments at 17.

3. habitat loss impacts, including both permanent loss of habitat to the construction of facilities and the temporary loss of such habitat use in certain areas (which also has long term effects, see DOI Comments at 5), as well as the loss of access to habitat due to heavy Border Patrol presence, lights, noise and other impacts. While the agencies recognize that "[t]he greatest factor jeopardizing the majority of protected species is the loss or alteration of habitat," SPEIS at 4-18, nowhere does the SPEIS grapple with this loss, either at the site-specific or programmatic level. Thus, while the total projected loss of habitat from these activities is noted, the SPEIS does not even try to analyze what that cumulative loss, taken in conjunction with habitat loss and other impacts from all the other activities in the border area, will mean for the environment and wildlife along the border.

At the same time, while the SPEIS dwells at some length on the purported human benefits of JTF-6 and INS projects in reduced illegal entry and drug smuggling, we believe that the SPEIS has altogether overlooked some of the critical negative impacts on the human inhabitants of the border region. It does not address, for example, the human toll of these

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[3] We disagree with the SPEIS's suggestion that sodium vapor lights mitigate the effects on wildlife. SPEIS at 4-19. Our anecdotal experience is that, at least in the Operation Rio Grande area, mercury lights appear less harmful than sodium vapor lights. Of course, studies currently underway may provide more concrete answers to this question, assuming lighting continues to be used at all.

M&G-10. INS and JTF-6 stand by our statement that "..with proper placement and direction, no impacts to the endangered species should occur." However, due to the lack of sound scientific data regarding these specific individuals, INS and JTF-6 have committed to performing some studies to document the potential effects. While we acknowledge your comment to the contrary, it should also be noted that the Defenders of Wildlife or the DOI do not have sound scientific evidence of the opined adverse impacts. As we stated above, site specific analysis will be prepared prior to the fielding of any light.

M&G-11. INS and JTF-6 feel that noise impacts are adequately discussed given the programmatic nature of this document.

M&G-12. To date, all such barriers, have been installed in urban or developed areas where endangered species are highly unlikely to exist. In particular, no such barriers have been installed in the Lower Rio Grande which would impede migration of the ocelot or jagurandi. INS and JTF-6 stand by our response to DOI's comments regarding barriers to endangered species.

M&G-13. Habitat loss, primarily due to urban sprawl, agricultural clearing, and development for industrial purposes, is the single greatest factor jeopardizing listed species. The vast majority of the projects identified in the SPEIS are anticipated to occur within areas that have been previously disturbed and thus are not expected to cause additional losses to habitat suitable for supporting listed species. The cumulative effects of the anticipated projects, however, are presented in the SPEIS as a worse-case scenario. The cumulative effects within a region would be addressed in detail in future project-specific NEPA documents that are tiered to this SPEIS. In addition the USBP strategy of deterrence of UDAs has a proven beneficial impact of the environment.

M&G-14. The SPEIS does state that some illegal immigrants have chosen to attempt their illegal entry in remote areas, as an indirect result of the success of border control projects in urban areas. It should be emphasized, however, that INS does not "force" these immigrants to "search out more forbidding places;" this is a choice that they make in an effort to circumvent the legal processes and illegal enter the country.

M&G-15. INS and JTF-6 will consider various types of lighting during the planning of lighting projects and will take into consideration your comments in any site specific analysis. (footnote). By impeding/halting foot traffic and vehicular traffic by UDA along the border sensitive habitat may be avoided.

activities. As detailed in a recent issue of High Country News, the militarization and fortification of the border in Texas and California has not stopped the flow of migrants into the US. Susan Zakin, "The Arizona-Mexico Border Turns Into The 21st Century Frontier," High country News, Oct. 9, 2000. Instead, immigrants have simply been forced to search out more forbidding places to make a crossing. As a result, many have died in the Arizona desert and elsewhere. This human toll of the INS and JTF-6's nationwide border strategy should be fully analyzed as an environmental impact in the SPEIS, particularly given that there are now a number of years of data showing some of the trends in this area.

Similarly, while the SPEIS purports to analyze the socioeconomic impact of these projects in terms of reduced crime and drugs, it completely overlooks a critical beneficial impact of the migration which these activities seek to stop: the need for labor in the US. Indeed, it could not be more clear that unless there were jobs available in the US for these migrants to take once they make it through the border, they would not keep coming. Accordingly, the SPEIS should consider the negative economic impact in this country of our efforts to keep migrants out. As discussed below, a meaningful consideration of alternatives would also consider ways to make these jobs less appealing as a means to deter the migration in the first place.[3]

M&G-16. Analyses such as these are beyond the scope of the SPEIS and would not address the purpose and need of the proposed action.

In addition, the SPEIS overlooks the adverse impacts of these programs on tourism and recreation in these areas. For example, birding is an enormous tourist attraction in the border region of Texas. However, a number of these activities, such as high-intensity lighting, may interfere with bird migration patterns and otherwise impact the birding industry. Similarly, the adverse impacts of these projects on other wildlife will inevitably effect tourism directed at viewing that wildlife, as well as directly undermining the aesthetic values of more remote areas as a tourist destination. None of these impacts are considered here, although they should be common to much of the border region.

M&G-17. The FSPEIS has been revised to include the potential effects on tourism and recreation.

Finally, although the agencies state that one of the primary objectives of the SPEIS is to analyze the cumulative impacts of INS and JTF-6 activities, SPEIS at 1-20, in fact the cumulative impacts analysis in the SPEIS remains wholly inadequate. As noted above, evaluating cumulative impacts requires consideration of both the impact of all of these agencies' activities taken together, as well as the additional impact of all other activities taking place in the border region. 40 C.F.R. § 1508.8. To date, none of these cumulative impacts have been considered.

M&G-18. INS and JTF-6 disagree with your statements. The cumulative effects of the two agencies are presented throughout Section 4.8. The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. As mentioned before, given the geographic scope and programmatic nature of the SPEIS, it is impossible to identify the potential impacts of all activities within a specific location. INS/JTF-6 instead have committed to fully address all past, present and reasonably foreseeable future actions within site-specific NEPA documents that can provide a more meaningful and accurate evaluation of cumulative effects.

The SPEIS does acknowledge that cumulative effects "have occurred" and will "continue to occur." SPEIS at 4-31. However, the purpose of a NEPA document is not simply to acknowledge that there are impacts, but to consider what those impacts actually are, so that the decision-maker is aware of the impacts of each of the alternatives under consideration. Here, the

M&G-19. INS and JTF-6 disagree with your statements. The cumulative effects of the two agencies are presented throughout Section 4.8. Table 4-6 provides a quantification of the habitat altered by INS/JTF-6 activities, as does the remainder of the discussions within this section.

[3] At the same time, we fail to understand how the agencies can count as "positive impacts" the mere expenditure of money in the areas where it is engaging in these activities. SPEIS at 4-21. Certainly, if the human cost of these activities is to be ignored, the fact that these projects are some kind of jobs program for the border region should not be considered either.

M&G-20. Expenditure of Government monies does indeed create jobs and income (personal, sales, and taxes) on a local basis. Obviously these effects are dependent upon the size and duration of the expenditures. The potential loss of human life due to illegal immigrants selecting remote areas to make an illegal attempt to enter the country is addressed in the SPEIS, but not as an economic factor. Analyses such as these are beyond the scope of the SPEIS and would not address the purpose and need of the proposed action.

most specific the SPEIS gets as to cumulative impacts is to note that habitat reduction and lighting will have cumulative impacts, which might impact breeding and feeding patterns of certain species. Id. However, the agencies fail to at all quantify even those impacts, on the grounds that they are "difficult, if not impossible, to quantify." Id.

M&G-19 cont.

In short, as to each of the activities under consideration in the SPEIS, the agencies should separately analyze the cumulative impacts of the activity itself, when considered in conjunction with both all the other activities that are part of this program, as well as all other impacts taking place in this area. Thus, for example, in considering the impacts of these activities on migratory birds, the SPEIS should, at a minimum, consider the extent to which (a) lighting and noise may displace or misdirect birds; (b) habitat loss may deprive birds of nesting and resting grounds; and (c) and communication towers and other activities may kill or injure birds. The cumulative impacts of all of these activities should then be considered together with the many other perils migratory birds face in the area, from hunting, to other communication towers, to additional projected habitat loss. Moreover, to the extent certain bird species utilize large portions of the border area, the SPEIS is the place where all of these impacts should be considered as a whole. At the very least, however, the SPEIS should point to the future site-specific NEPA documents where these impacts will be considered on a regional or even more specific area, and explain what actions will be taken to ensure compliance with the MBTA and the international conventions for the protection of migratory birds.

M&G-21

Section 4.8 of the SPEIS provides a cumulative impact analysis for each of the viable alternatives, relative to INS and JTF-6 actions. The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Again, given the geographic scope of the project and the uncertainty of project types and locations over the next five years, it would be impossible to accurately evaluate the cumulative effects within a given area. Instead, INS and JTF-6 will continue to address such affects on a regional basis within site- or project-specific NEPA documents. The Final SPEIS has been revised to reflect the USFWS Director's Order No. 131 and the EO-11629, issued on 11 January 2001, since these are recent changes to the MBTA regulations that were made after the revised Draft WPEIS was released.

Another example of the inadequacy of the agencies' current approach to cumulative impacts concerns the Sonoran Pronghorn. Although there are seven federal agencies undertaking activities which are adversely impacting this critically imperilled species, the SPEIS does not even begin to grapple with the cumulative impacts of INS and JTF-6 activities -- such as disruptive, low-level helicopter flights during the critical Pronghorn fawning season -- on this species, when taken in conjunction with these other agencies' activities, which include dropping bombs and shooting live ammunition in Pronghorn habitat, road and fence obstructions, cattle grazing and large-scale troop maneuvers.

M&G-22

INS prepared a Biological Assessment and received a Biological Opinion (BO) from the US Fish and Wildlife Service in October 2000 regarding the potential effects of INS and USBP activities on the Sonoran Pronghorn. The BO, in summary, indicated that these activities may affect, but not adversely affect, the Sonoran Pronghorn. The activities were judged not to jeopardize the continued existence of the species.

A similar analysis is necessary for all other impacts -- on sensitive species, other flora and fauna, and the aesthetic values of the region. Indeed, the Department of Interior has itself noted the need for precisely this kind of analysis, explaining that DOI is "particularly concerned about the potentially significant indirect and cumulative adverse impacts of increased development, aircraft and vehicle traffic, poaching, and other activities that will result in loss of wildlife, and disturbance or degradation of natural habitats." DOI Comments at 3. However, this concern does not appear to have been addressed in the latest draft of the SPEIS.[4]

M&G-23

DOI expressed an opinion, rather than a suggested revision to the SPEIS; thus, INS and JTF-6 believed, and still feel, that the no other written response was warranted, except that their concern was noted. DOI is fully aware that their agencies are consulted during the planning of all INS and JTF-6 construction projects. Furthermore, since DOI did not object to this response during their latest submission of comments, it must be assumed that DOI concurred with this response. Issues regarding the lighting, burning and mowing effects were addressed in the responses to the DOI and in the revised Draft SPEIS. It should be emphasized again that INS and JTF-6 do not intentionally start fires and do not encourage or condone such practices for vegetation control.

[4] DOI also expressed concern that "the overall integrity of habitat on state and federal protected areas along the border has been jeopardized by past actions and will continue to be disrupted." DOI Comments at 4. Thus far, the agencies' only response to this critical issue has been: "Thank you for your comment." Id.; see also DOI Comments at 4 (where DOI explained that many areas "have already suffered from increases in USBP and JTF-6 activity including more vehicle and foot patrols, more low flying aircraft, more cameras and lights, etc.");

When these same concerns were raised by DOI in their comments on the initial draft SPEIS, the agencies' response was that these kind of impacts will be considered in "subsequent, site-specific NEPA documents tiered to this SPEIS." DOI Comments at 8. However, if cumulative impacts are going to be evaluated there, it is not clear exactly what those NEPA documents will be tiering to here. In short, either those future NEPA documents must thoroughly address cumulative impacts, or, if they are legally going to be tiered off of this SPEIS, the SPEIS itself must properly analyze those impacts.

M&G-24 Site- or project-specific NEPA documents will tier to this SPEIS and will provide more detailed information and analysis than can be accomplished in a programmatic document, particularly one of this magnitude. A programmatic NEPA document does not need to have every detailed factor identified, addressed, and mitigated in order for other NEPA documents to tier from it. Tiering primarily identifies the continuation of the analyses and saves time, money, and paper by allowing incorporation of previously documented information. The subsequent NEPA documents would fill in the data gaps by performing environmental analyses of a better defined proposed project—otherwise, there would be no need to tier.

C. Alternatives Are Not Properly Considered In The SPEIS

The SPEIS also does not consider a proper range of alternative courses of action. Indeed, the options considered are all variations on a theme, reshuffling the three major components of the program: operations support, engineering and general support, and the "ISIS" technology assistance program.

M&G-25 Comment Noted.

An in-depth consideration should be given to the no action alternative. For example, in a recent Environmental Impact Statement for Yellowstone National Park, the Park Service devoted an entire chapter of the EIS to a detailed discussion of the no action alternative. See Winter Use Plans Final EIS Vol. 1 (September 2000). The purpose of considering the impacts of such an alternative is to enable the decision-maker to compare those impacts with the impacts of the other alternatives under consideration. Here, by simply saying that under the no action alternative there will be "no impacts," the agencies are failing to fulfill the objective of considering this alternative.

M&G-26 The no action alternative does not satisfy the purpose and need for INS and USBP to gain, maintain and extend control of the border. Nor, does it satisfy the purpose and need for JTF-6 to provide realistic training of the Nation's military units. Still, it is carried forward, as required by CEQ, for full analysis in the SPEIS. INS and JTF-6 did not state the no action alternative would have "no impacts;" rather, implementation of this action would have significant impacts on various resources.

Moreover, in our view, were the agencies to seriously consider both the costs, and benefits, to the environment, wildlife, and people of the region of going forward with these programs, they would choose the no action alternative. In particular, while we can continue to make border-crossing increasingly perilous, so long as there are jobs on this side of the border, people will continue to find a way into this country. As a result, these programs will only continue to result in the loss of life as people try to cross the border in more remote areas.

M&G-27 Thank you for your comment.

At the same time, these efforts have enormous adverse impacts, to wild animals and plant species, including threatened and endangered species which require these habitats to survive; to the natural quiet and wilderness values of these areas; and to the ability of the public to enjoy these areas. Only by adequately assessing these areas without these programs can all of these impacts be most accurately quantified.[5]

M&G-28 The No Action Alternative was carried forward for analysis in the SPEIS as a comparison against all of the viable alternatives. See also M&G-26. Impacts to the border area's vegetation and wildlife for all alternatives, including the no action alternative, have been addressed in the SPEIS. Impacts to recreation and tourism will be expanded in the Final SPEIS.

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id. at 5 (explaining that lighting, mowing and burning "of what little cover remains in some areas for the movements of the[ ] endangered species along the Lower Rio Grande Valley increases the probability of a significant cumulative impact" on those species).

[5] The SPEIS also erroneously asserts that INS's goals cannot be achieved without JTF-6 assistance. It is our understanding, however, that INS considers Operation Rio Grande to be a success, without having used the kind of JTF-6 support called for here.

M&G-29 The goals of both agencies, as mandated by Congress under various Acts defined in the SPEIS, can not be achieved without assistance from JTF-6 to INS. INS and USBP do receive support from other agencies and private contractors. JTF-6 does provide support to other drug law enforcement agencies, as stated in the SPEIS. However, in order to successfully achieve the mission of both agencies, JTF-6 needs to support INS and USBP. JTF-6 has also provided engineering and general support to the McAllen Sector.

In addition to the no action alternative, other less environmentally harmful alternatives through which INS and JTF-6 could work to deter illegal immigration should also be considered. For example, were the agencies to crack down on employers who hire illegal immigrants, there would be significantly less incentive for these individuals to even attempt a border crossing. Similarly, there are a number of less intrusive means by which such crossings can be deterred, such as the restoration of brush habitat along the Rio Grande in South Texas. The need to simply get through such brush could pose the same kind of deterrent as high-intensity lights, as well as facilitating the capture of those who do try to cross the border. Undoubtedly, there are a number of additional, more natural barriers which could be utilized, or at least attempted, before the agencies resort to high-intensity lights, noisy generators, low level overflights and other highly disruptive intrusions. However, none of these alternatives are even mentioned in the SPEIS.

M&G-30 INS and USBP, in concert with other Federal agencies, continue to "crack down on employees who hire illegal immigrants" as part of their on-going daily operations. JTF-6 is prohibited by the Posse Commitatus Act to participate in such activities. Alternative designs for barrier systems are considered for each site- or project-specific mission. Examples of alternatives and alternative designs that are considered in site- or project-specific documents were discussed in Section 2.1 of the SPEIS.

Finally, the agencies have given inadequate consideration to aspects of the "technology only" alternative. SPEIS at 2-7. In particular, more consideration must be given to going forward with only those technologies which might have minimal adverse impacts, such as remote cameras and ground sensors. Were the INS and JTF-6 to rely primarily on these less intrusive means to detect illegal immigrants, many of the goals of the program might be accomplished with significantly fewer adverse environmental impacts. The possibility that funding for these alternative technologies might be an impediment to their implementation certainly is not a grounds to not consider them. Instead, funding issues, and a potential timetable for moving from more harmful activities, such as lighting, to more benign technologies, should be discussed here.

M&G-31 This alternative was eliminated because it would allow the INS/USBP to detect illegal entries, but do nothing to enhance their capability to apprehend the illegal aliens. Plainly put, they could be counted, but not caught. Without certainty of detection and apprehension, deterrence will not be achieved. However, the employment of neotechnologies such as the RVS and ground sensors in conjunction, other traditional law enforcement strategies has been analysis in this document and will be considered more fully on a site by site basis as projects are proposed.

D. Site-Specific Actions May Not Be Legally Tiered To This SPEIS.

In light of the serious infirmities in the SPEIS discussed above, in our view neither INS nor JTF-6 can legally make future implementation decisions by tiering to this document. Instead, site-specific decisions will have to be made based upon free-standing NEPA documents, which themselves fully grapple with alternatives and impacts, including cumulative impacts.

M&G-32 The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Site- or project-specific NEPA documents will tier to this SPEIS and will provide more detailed information and analysis than can be accomplished in a programmatic document, particularly one of this magnitude. A programmatic NEPA document does not need to provide every detailed factor identified, addressed, and mitigated in order for other NEPA documents to tier from it. Tiering primarily identifies the continuation of the analyses and saves time, money, and paper by allowing incorporation of previously documented information. The subsequent NEPA documents would fill in the data gaps—otherwise, there would be no need to tier.

One particular concern of Sierra Club and Frontera in this regard is that the agencies not tier future implementation decisions to this SPEIS without a further opportunity for public comment. Given how little information is presented in this document concerning the nature and impacts of these activities, it is obviously impossible for Sierra Club, Frontera and others to provide the kind of comments they will be able to provide to site-specific NEPA documents. However, if the INS or JTF-6 were to consider this SPEIS to be all the NEPA coverage needed for an action, or even to prepare an EA which is not first issued in draft form with an adequate *public comment opportunity, the public will not in fact get another opportunity to provide the* requisite input, and, as a result, the decision-makers will lack adequate information to inform whether and how to proceed. Moreover, the agencies will also have violated their mandatory obligation under the CEQ regulations to -- "to the fullest extent possible" -- "[e]ncourage and facilitate public involvement in devisions which affect the quality of the human environment." 50 C.F.R. § 1500.2(d). In short, then, we believe that, as currently written, this SPEIS cannot be used to tier further implementation decisions.

M&G-33 All INS and JTF-6 tiered to the original 1994 PEIS and any tiered to this SPEIS have, and will continue to be, available for public review prior to initiation of the project. Consequently, INS and JTF-6 have gone above the normal requirement of CEQ regulations for full disclosure to the public and to facilitate public involvement.

Moreover, to the extent this SPEIS continues to disregard cumulative impacts, future site-specific documents must fully address those impacts, including both the impacts of all of these activities, as well as the impacts of addition federal, state and private actors. Thus, for example, when the EIS for Operation Rio Grande is prepared, it is critical that the agencies consider not only the cumulative impacts of the lights, noise and other activities on ocelots, jaguarundis and other species, but also that they consider those impacts in conjunction with the many other impacts already harming the species, such as habitat loss and other human encroachments. Only by fully assessing cumulative impacts will the decision-makers be in a position to know the extent to which specific proposed activities will incrementally impact the environment.

M&G-34

The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Section 4.8 of the SPEIS provides a cumulative impact analysis for each of the viable alternatives, relative to INS and JTF-6 actions. Again, given the geographic scope of the project and the uncertainty of project types and locations over the next five years, it would be impossible to accurately evaluate the cumulative effects within a given area. Instead, INS and JTF-6 will continue to address such affects on a regional basis within site- or project-specific NEPA documents.

E. The SPEIS Calls For Using Military Personnel To Undertake Police Actions Within U.S. Borders In Violation of Federal Law.

One additional concern which should be more fully addressed in the SPEIS is the extent to which JTF-6 plans to take actions which are inconsistent with the role the military is permitted to play within our borders. While the SPEIS acknowledges that the military may not engage in police actions within the US, see SPEIS at 1-10, we believe that the nature of the proposed activities for JTF-6 fall over the line. For example, if JTF-6 personnel are going to engage in ground patrols, it seems unlikely in the extreme that they will not be put in the position of actually interdicting people, rather than simply "assisting" Border Patrol personnel. Similarly, we fail to see how using JTF-6 personnel to "monitor" border crossings distinguishes them from those making arrests. Under this reasoning, as long as it is a Border Patrol agent who puts on the handcuffs and drives people away, the military is not taking police action within this country. Given the strict prohibitions on using the military in this fashion -- and the obvious policy reasons for these limits -- these uses of JTF-6 are simply not permitted. However, at the very least the SPEIS has to more fully consider the impacts of using our military in this manner, including the precedent it sets for future internal use of our military forces. See 50 C.F.R. § 1508.27(b) (10) (requiring consideration of "[w]hether the action threatens a violation of Federal, State, or local law . . . .").

M&G-35

Moreover, as was stated in the SPEIS, Section 1004, P.L 101-510, FY 91 NDAA (as amended) states that the Secretary of Defense may provide support for the counterdrug activities of any other department of agency of the Federal Government or of any State, local or foreign agency for any of the purposes identified in the Authorization Act. Accordingly, Joint Task Force Six, as the Department of Defense operational headquarters tasked with this mission, may lawfully provide this support.

CONCLUSION

While the Sierra Club and Frontera continue to agree that a meaningful SPEIS would be helpful to JTF-6 and the INS in evaluating the environmental impacts of their border-wide program, the latest draft of the SPEIS does not fulfill that promise. It needs to be revised to adequately address all of the impacts, as well as cumulative impacts, of these activities, and to consider a proper range of alternatives, including a no action alternative, and an alternative which would only use the most least intrusive technologies. Alternatively, JTF-6 and INS may try to address these matters in site-specific EISs. However, those EISs must themselves adequately address impacts and alternatives, and hence may not give short-shrift to these matters on the grounds that they were previously addressed in this SPEIS. Finally, JTF-6 and INS must come into compliance with NEPA by no longer implementing its activities in the border region without first adequately considering those activities in the manner required by NEPA, the ESA, the MBTA and other federal laws.

M&G-36 Thank you for your comment.

Sincerely,

Howard Crystal, on behalf of
the Lone Star Chapter of the Sierra Club
and the Frontera Audubon Society

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November 8, 2000

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Re: Revised Draft Supplemental Programmatic Environmental Impact Statement, for Immigration and Naturalization Service and Joint Task-Force Six Activities Along the U.S./Mexico Border
NMGF Doc. 7190

Dear Mr. Verwers:

The New Mexico Department of Game and Fish (Department) has reviewed the Revised Draft Supplemental Programmatic Environmental Impact Statement (Revised Draft) for the U.S. Immigration and Naturalization Service (INS) and Joint Task-Force Six (JTF-6) Activities along the U.S./Mexico border. We submitted comments on the 1999 Draft Supplemental Programmatic Environmental Impact Statement (Draft) on 2 July 1999. Unfortunately, due to a change in personnel, our comments were not submitted by the deadline. Presumably, our comments were not included or addressed in the Revised Draft for this reason. We also included lists of New Mexico's Threatened and Endangered species under the Wildlife Conservation Act for the for the five affected counties in New Mexico (Hidalgo, Grant, Luna, Dona Ana and Otero), but these lists were not incorporated into the Revised Draft. Since our comments did not become part of the public record, we reiterate here some of our previous comments that we believe were not adequately addressed in the Revised Draft, add some additional comments, and again submit the county species lists for inclusion in the Final EIS.

This project encompasses a 50-mile-wide corridor along the U.S.-Mexico border in Texas, New Mexico, Arizona and California. Projects proposed by INS and JTF-6 include construction and upgrading of roads, bridges, culverts, administrative buildings, fences, USBP stations and checkpoints, helipads, communication towers, and temporary staging and detention facilities. Operational support would include listening and observation posts, ground patrols, terrain denial and aerial reconnaissance. Proposed Integrated Surveillance Intelligence System (ISIS) facilities include remote video surveillance systems, cameras, ground sensors and lights.

The Department's major concerns with this project are 1) the lack of an adequate cumulative effects analysis; 2) an apparent disregard for impacts to wildlife habitat from current operations; and 3) ensuring that the Department has an opportunity to review all projects before implementation.

NMDGF-1 The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Given the geographic scope and programmatic nature of the SPEIS, it is impossible to identify the potential impacts of all activities within a specific location. INS makes every attempt to be proactive in its planning, but must also be somewhat reactive to changes in the smugglers and illegal immigrants modes of operation. Thus the cumulative effects of all Federal, state and local governments, as well as non-governmental organizations would be impossible to address in a document of this scope. The INS/JTF-6 instead have committed to fully address all past, present and reasonably foreseeable future actions within site-specific NEPA documents that can provide a more meaningful and accurate evaluation of cumulative effects. The number and types of activities that are expected over the entire border region have been identified.

NMDGF-2 Your department has been afforded the opportunity to provide input during the planning process and has received all NEPA documents for review. INS and JTF-6 routinely consider impacts to wildlife populations and habitat and make every attempt to minimize these impacts. Copies of all NEPA documents have been sent to your department for your review comments during the process. The 1994 PEIS included the anticipated types of projects in New Mexico and analyzed the potential impacts to wildlife/habitat, in generic programmatic terms. Projects identified since then have been addressed in site-specific NEPA documents tiered to the 1994 PEIS. All of the projects within New Mexico have undergone public scrutiny during the NEPA process.

NMDGF-3 The New Mexico Depart of Game and Fish, as indicated above, has been provided a copy of the NEPA documents for all INS and JTF-6 projects within New Mexico. In addition, as standard operating procedures, we contact your department as early as possible to request input from your agency regarding listed species, sensitive resources, and general input regarding the potential effects of the project.

GENERAL COMMENTS:

The Revised Draft is intended to act as a programmatic National Environmental Policy Act (NEPA) document that other project-level NEPA documents will "tier" to, as allowed by NEPA. The Department believes that the Revised Draft is deficient, however, by not providing an adequate cumulative effects analysis of the potential impacts of numerous tactical and engineering projects to wildlife and sensitive habitats in New Mexico and other affected states. Project-level NEPA documents will not possibly be able to provide cumulative effects analyses for past and future JTF-6 projects within the entire project area, or even in New Mexico. This results in the entire JTF-6 operation being broken down into small component parts without an overall evaluation of cumulative impacts, which we believe fails to meet the intent of NEPA.

NMDGF-4

Cumulative effects of INS and JTF-6 activities (past, current, and anticipated) are discussed in Section 4.8 of the SPEIS. Given the geographic scope and programmatic nature of the SPEIS, it is impossible to identify the potential impacts of all activities within a specific location. INS makes every attempt to be proactive in its planning, but must also be somewhat reactive to changes in the smugglers and illegal immigrants modes of operation. Thus the cumulative effects of all Federal, state and local governments, as well as non-governmental organizations would be extremely difficult, if not impossible, to address in a document of this scope. The INS/JTF-6 instead have committed to fully address all past, present and reasonably foreseeable future actions within site-specific NEPA documents that can provide a more meaningful and accurate evaluation of cumulative effects. The estimated number and types of activities that are expected over the entire border region have been identified.

With regard to the JTF-6 position that identification of specific projects is impracticable, therefore not allowing for a comprehensive cumulative effects analysis, the Draft anticipated that over 6,000 acres of wildlife habitat would be altered during the next five years in the project area, and the Revised Draft identified an additional 900 acres of project disturbance. Page 2-2 of the Revised Draft identifies 210 miles of proposed road and 48 miles of proposed lights in New Mexico. It appears obvious that enough information is known about potential projects and locations to allow a meaningful cumulative effects analyses to be conducted on potential impacts to wildlife and habitats.

NMDGF-5

See Response above.

The five affected New Mexico counties are the most biologically diverse in the state and provide habitat for many of New Mexico's special status species. This area also contains many important and sensitive habitat types and special land use management areas, including 19 Areas of Critical Environmental Concern (ACEC), 12 Habitat Management Plan (HMP) areas, three Wilderness Study Areas (WSA), and a unit of the Coronado National Forest.

NMDGF-6

Thank you for your comment. INS and JTF-6 are aware of these sensitive resources, as described in Volume 3 of the Technical Support Document and summarized in Section 3.3 of the SPEIS. Any proposed projects will be designed with an eye towards these sensitive resources. The USBP is committed to employing appropriate mitigation measures.

The Department is concerned with the potential direct, indirect and cumulative impacts to sensitive wildlife and habitats from implementation of some of the more disturbance-prone actions, such as "terrain denial". Page 1-12 of the Revised Draft describes terrain denial activities as typically involving 150 soldiers camped at various locations along the border for a duration of about 30 days, although it states that the actual number of personnel may range from 60 to 600. Page 1-12 of the Revised draft states that Tactical Operations Centers usually impact from two to five acres, and that vegetation is not cleared unless absolutely necessary. However, Department field officers have observed an apparent disregard by JTF-6 personnel of impacts to vegetation, which questions the ability of these operations to minimize impacts to sensitive habitats. Our observations indicate that that vegetation is usually cleared, encampments are not necessarily placed in less sensitive areas, military vehicles routinely drive off road, and that operational activities have caused unnecessary mortality of state-regulated wildlife (see #2 below).

NMDGF-7

JTF-6 disagrees with your allegations. Surveys are performed by qualified, professional biologists to identify off-limits areas that contain sensitive habitats, listed species and/or other sensitive and valuable resources. We note your concerns, however, and will continue to continue to coordinate with your agency regarding the placement of TOCs, bivoual sites, etc. The JTF-6 units are provided copies of the NEPA document, with the appropriate maps, and are informed to strictly remain within the project boundaries. Regarding terrain denial in particular, these types of activities now require approval from the Secretary of Defense, as stated on pages 1-10, 1-12, 2-3, and 5-3 of the SPEIS.

Therefore, we request that the following questions be addressed in the next version of the EIS:

1. What opportunity will the Department have to review JTF-6 activities, including termin denial actions and construction/engineering projects before they occur and before a decision is made to remove vegetation to accommodate military personnel and equipment?
2. What are the criteria for JTF-6 activities that determine whether notification and environmental review documentation will occur?
3. Will the Department be informed of specific project locations that will allow us to inspect the site for impacts before and after the activity has occurred?
4. What criteria will be used for determining encampment locations, and how will the potential for adversely impacting sensitive habitats or wildlife be evaluated? Will anticipated terrain

NMDGF-8

INS and JTF-6 coordinate with the US Fish and Wildlife Service and appropriate state resource agencies, including your department, during the planning of all construction projects in an attempt to avoid impacts to listed species, as well as sensitive habitats that could support listed species. The New Mexico Depart of Game and Fish, as indicated above, has been provided a copy of the NEPA documents for all INS and JTF-6 projects within New Mexico. In addition, as standard operating procedures, we contact your department as early as possible to request input from your agency regarding listed species, sensitive resources, and general input regarding the potential effects of the project. We would welcome a site visit by your staff, but cannot commit to extensive project delays to satisfy your staff's schedules. Surveys are performed by qualified, professional biologists to identify off-limits areas that contain sensitive habitats, listed species and/or other sensitive and valuable resources. The JTF-6 units are provided copies of the NEPA document, with the appropriate maps, and are informed to strictly remain within the project boundaries. Environmental briefings, as discussed on page 1-8 of the SPEIS, are conducted with each JTF-6 unit prior to initiation of construction activities.

denial encampment sites be surveyed for sensitive wildlife before implementation? Our field observations suggest a lack of discrimination by military personnel of sensitive or important habitat types for encampment sites.

5. What will be the basis for decision by the unit commander on whether or not to remove vegetation? Our field observations suggest that vegetation is usually removed, contrary to statements in the Revised Draft.
6. Will information be available to the unit commander on the potential wildlife value of the site or presence of sensitive species?
7. Will these activities occur in special land use management areas? If so, what other protective measures will be taken to ensure that sensitive habitats and wildlife are not adversely affected? We have observed activities in special land use management areas in the past that disregarded impacts to wildlife and habitats.

NMDGF-8 cont.

SPECIFIC COMMENTS:

1. Section 3.3.7 (page 3-21) of the Revised Draft contains outdated information, and should be corrected to state that in the affected counties, 70 species are protected by the Department under the New Mexico Wildlife Conservation Act. The 26 species listed as Endangered include 3 fish, 10 birds, 2 amphibians, 4 reptiles, 6 mammals, and 1 mollusk. The 43 species listed as Threatened include 6 fish, 19 birds, 1 amphibian, 6 reptiles, 6 mammals, and 5 mollusks, and the jaguar is listed as Restricted (New Mexico Department of Game and Fish. 2000. Biota Information System of New Mexico. New Mexico Dept. of Game and Fish electronic database, Version January 2000, Santa Fe, New Mexico).

NMDGF-9 Comment noted. An errata sheet will be sent to all recipients of the Technical Support Documents to correct these mistakes. In addition, the Final SPEIS has been revised accordingly.

2. Section 2.3 discusses Alternative 3: Continuation of Program with no INS Engineering Activities. Page 2-6 of the Revised Draft states:

   "Potential direct adverse environmental impacts would be greatly reduced under Alternative 3 since the majority of adverse environmental impacts are associated with construction activities. Some INS construction activities would still be required. For example, access roads to some tower sites may be needed since these systems are generally placed in remote areas at higher elevations."

   The Revised Draft should acknowledge that tower site construction in remote high elevation areas might impact sensitive species such as desert bighorn sheep, raptors and the state endangered Gila monster. Department field personnel have observed mortality of raptors from JTF-6 camera towers where power lines were not shielded. All raptors are protected by state law (New Mexico Statutes Annotated, 1978, 17-2-14, as amended), and the federal Migratory Bird Treaty Act. Transmission lines must be designed to prevent or minimize the electrocution of raptors. Full environmental review with the Department and other agencies should occur before these projects are implemented.

NMDGF-10 An errata sheet will be sent to all recipients of the Technical Support Documents to reflect the new guidance relative to the MBTA. In addition, the Final SPEIS has been revised to reflect the USFWS Director's Order No. 131 and the EO-11629, issued on 10 January 2001, since these are recent changes to the MBTA regulations that were made after the Revised Draft SPEIS was released.

3. Page 5-2 of the Revised Draft states "All areas which are known to support threatened or endangered species will be considered off limits to avoid impacts to these resources." The Revised Draft, however, admits to impacts to listed species during previous operations, which questions the effectiveness of evaluation, planning and communication between participants. The document is unclear regarding how these areas will be identified and how communication among the JTF-6 agencies and the military will be coordinated to ensure that these areas are protected. Will specific locations be identified in project disclosure so the Department will have an opportunity to evaluate projects before implementation? Will special land use management areas be automatically excluded from JTF-6 operations? What additional protections will ensure that these areas are not adversely impacted?

NMDGF-11 The SPEIS states that only one incident occurred since 1994 that involved listed species. Two other incidents occurred between 1989 and 1994. None of these incidents resulted in an effect that was considered to potentially jeopardize the continued existence of a listed species. In fact, to compensate for the last incident, which involved the San Diego button celery, JTF-6 restored the sites and based upon a 2-year monitoring study, was successful in establishing populations of the plant at higher densities. Again, the New Mexico Department of Game and Fish will continue to be afforded the opportunity to provide input to INS and JTF-6 activities during the planning stages and the public review process. Site specific EAs tiered to this document will address designation of off-limits areas that would be necessary to avoid sensitive resources.

We have attached the updated 2 May 2000 Biota Information System of New Mexico (BISON-M) New Mexico Wildlife of Concern lists for the five affected counties for inclusion in future documents.

We appreciate the opportunity to comment on this SPEIS. However, without site-specific project information, the Department cannot adequately compare the potential impacts of each alternative, recommend an alternative, and suggest mitigation measures. Should you have any further questions, please contact Mark Watson, Habitat Specialist, of my staff at (505) 827-1210.

Sincerely,

Tod W. Stevenson

Tod W. Stevenson, Chief
Conservation Services Division

TWS/MLW

Encl.

Xc (w/o encl.)
Field Supervisor (Ecological Services, USFWS)
Scott Brown (Assistant Director, NMGF)
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Alexa Sandoval (Southeast Area Habitat Specialist, NMGF)
Pat Mathis (Southwest Area Habitat Specialist, NMGF)
Mark Watson (Conservation Services Habitat Specialist, NMGF)

NMDGF-12 An errata sheet will be sent to all recipients of the Technical Support Documents to correct these mistakes. In addition, the Final SPEIS has been revised accordingly.

NMDGF-13 Thank you for your comment.

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November 9, 2000

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Consultation No. 2-11-01-I-001

Dear Mr. Verwers:

This responds to your document received November 3, 2000, requesting comments on the revised draft of proposed JTF-6 Support Services to INS Supplemental Programmatic Environmental Impact Statement (DSPEIS). The proposed action is to implement the full support from JTF-6 to the INS strategy for enforcement activities within a 50-mile corridor along the southwestern U.S./Mexico border. The JTF-6 support would be grouped into three support service categories: operational, engineering, and general.

Specific Comments

DSPEIS, Section 1.3.1.4 Terrain Denial, pg. 1-12 - The DSPEIS states in paragraph one that "The TOC area usually encompasses from two to five acres; however, vegetation would not be not be removed, cut or otherwise cleared unless absolutely necessary".

JTF-6 should make sure that a qualified biologist surveys the areas for clearing for federally-listed threatened or endangered species before the areas are cleared. If listed species are present, the United States Fish and Wildlife Service (USFWS) should also be notified before any clearing takes place.

USFWS-1

INS and JTF-6 coordinate with the US Fish and Wildlife Service and appropriate state resource agencies during the planning of all construction projects in an attempt to avoid impacts to listed species. If a project cannot be modified to avoid potential effects to a listed species, INS and JTF-6 would (and have) entered into formal Section 7 consultation with the US Fish and Wildlife Service. Surveys are performed prior to initiation of construction to identify the presence of migrant birds and suitable nesting habitat.

DSPEIS, Section 1.3.2.2 Fence and Barriers, pg. 1-14 - The DSPEIS states in paragraph one that "Several types and styles of fences have been constructed by INS and JTF-6 including metal Sandia fences, concrete bollard fences, solid steel landing mat fences, and wrought iron decorative fences"

JTF-6 should coordinate with USFWS and state Game & Fish agencies to make sure the fence design will not impede movement of listed species and other wildlife in particular areas.

USFWS-2

INS and JTF-6 coordinate with the US Fish and Wildlife Service and appropriate state resource agencies during the planning of all construction projects in an attempt to avoid impacts to listed species and general wildlife populations.

DSPEIS, Section 1.3.2.5 Checkpoints and Other Building Construction and Rehabilitation, pg. 1-17 - The DSPEIS states in paragraph one, "New construction may also be requested and could involve construction of parking

ramps and lots, taxiways, small office buildings, and storage or maintenance sheds. New building construction activities would typically occur within or adjacent to existing INS/USBP facilities".

INS needs to consult with USFWS if there is any new or additional facility construction which may affect listed species.

DSPEIS, Section 1.3.2.7 Communication Towers - Paragraph one states that "Communication towers are typically built adjacent to a USBP facility; however, some towers have been constructed by JTF-6 in remote locations, usually on tops of ridges, to enhance relay of radio transmissions and provide remote surveillance operations"

The construction of new towers creates a potentially significant impact on migratory birds, especially some 350 species of night migrating birds. Communication towers are estimated to kill 4-5 million birds per year, which violates the spirit and the intent of the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 703-712) and the Code of Federal Regulations at part 50 designed to implement the MBTA. Some of the species affected are also protected under the Endangered Species Act and Bald and Golden Eagle Act.

The Service has the following comments on migratory birds. All native migratory birds (e.g., waterfowl, shorebirds, passerines, hawks, owls, vultures, falcons) are afforded protection under the Migratory Bird Treaty Act. Communication towers and antennas may pose a hazard to migratory birds in flight and may pose a threat to nesting birds attracted to the site, depending on tower height, physical design, lighting, and site location. **The following Service guidelines have been approved as of September 14, 2000 and are now being implemented.**

Service Guidelines For Recommendations On Communications Tower Sitings

1. Any company/licensee proposing to site a new communications tower is strongly encouraged to co-locate the communications equipment on an existing communication tower or related structure (e.g., church steeple, billboard mount, monopole, or building mount). Depending on tower load factors, from 6-10 providers may collocate on an existing tower. If collocation is not possible, the tower licensee should justify in writing why co-location is not feasible.

2. If collocation is not feasible, providers are strongly encouraged to construct towers less than 199 feet AGL, using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc). Such towers should be unlighted if Federal Aviation Administration regulations permit.

3. If constructing multiple towers, providers should consider the cumulative impacts of all of those towers to migratory birds and threatened and endangered species as well as the impacts of each individual tower.

4. If at all possible, new towers should be sited within existing "antenna farms" (clusters of towers). Towers should not be sited in or near wetlands,

USFWS-3 INS and JTF-6 coordinate with the US Fish and Wildlife Service and appropriate state resource agencies during the planning of all construction projects in an attempt to avoid impacts to listed species. If a project can not be modified to avoid potential effects to a listed species, INS and JTF-6 would (and have) entered into formal Section 7 consultation with the US Fish and Wildlife Service.

USFWS-4 Potential effects of towers on birds, particularly raptors, were discussed in Section 4.8.1 of the SPEIS. However, INS and JTF-6 appreciates the suggested environmental design features and have incorporated them into the Final SPEIS. It should be noted that typical remote video surveillance (RVS) system towers are 60-80 foot high and no separate RVS tower, to date, has been constructed at 199 feet or higher above ground level.

other known bird concentration areas (e.g., State or Federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. Towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.

5. If taller (>199 feet AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the Federal Aviation Administration should be used. Unless otherwise required by the FAA, only white (preferable) or red strobe lights should be used at night, and these should be the minimum number, minimum intensity, and minimum number of flashes per minute (longest duration between flashes) allowable by the FAA. The use of solid red or pulsating red warning lights at night should be avoided. Current research indicates that solid or pulsating (beacon) red lights attract night-migrating birds at a much higher rate than white strobe lights. Red strobe lights have not yet been studied.

6. Tower designs using guy wires for support which are proposed to be located in known raptor or waterbird concentration areas or daily movement routes, or in major diurnal migratory bird movement routes or stopover sites, should have daytime visual markers on the wires to prevent collisions by these diurnally moving species. For guidance on markers, see *Avian Power Line Interaction Committee (APLIC). 1994. Migrating Bird Collisions with Power Lines: The State of the Art in 1994. Edison Electric Institute, Washington, D.C., 78 pp,* and *Avian Power Line Interaction Committee (APLIC). 1996. Suggested Practices for Raptor Protection on Power Lines. Edison Electric Institute/Raptor Research Foundation, Washington, D.C., 125 pp.* Copies can be obtained via the Internet at http://www.eei.org/resources/pubcat/enviro/, or by calling 1-800/334-5453).

7. Towers and appendant facilities should be sited, designed and constructed so as to limit or minimize habitat loss within and adjacent to the tower "footprint." However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.

8. If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site should be recommended. If this is not an option, seasonal restrictions on construction may be advisable in order to avoid disturbance during periods of high bird activity.

9. In order to reduce the number of towers needed in the future, providers should be encouraged to design new towers structurally and electrically to accommodate the applicant/licensee's antennas and comparable antennas for at least two additional users (minimum of three users required for each tower structure), unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.

10. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.

USFWS-4
cont.

11. If a tower is constructed, Service personnel or researchers from the Communications Towers Working Group should be allowed access to the site to evaluate bird use, conduct dead-bird searches, to place net catchments below the towers, and to place radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment as necessary to assess and verify bird movements and to gain information on the impacts of various tower sizes, configurations, and lighting systems.

12. Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

USFWS-4 cont.

In order to obtain information on the usefulness of these guidelines in preventing bird strikes, and to identify any recurring problems with their implementation which may necessitate modifications, please advise us on the final location and specifications of the proposed tower, and which of the measures recommended for the protection of migratory birds were implemented. If any of the recommended measures can not be implemented, please explain why they were not feasible.

USFWS-5 INS and JTF-6 will coordinate with the US Fish and Wildlife Service regarding the design and location of RVS towers, as their need and potential sites are identified. These will be addressed in site-specific NEPA documents.

DSPEIS, Texas Gulf Coast Volume 1), Section 3.1.7 Threatened/Endangered Species and Critical/Sensitive Habitats, pg.3-6 - Paragraph two states that "One Federally-designated critical habitat (land, water, and air) exists for the whooping crane in the Arkansas National Wildlife Refuge, and the area encompassing the Lower Rio Grande National Wildlife Refuge (LRGV NWR) is deemed as sensitive habitat".

A correction needs to be done to change Arkansas NWR to Aransas NWR. Also, the DSPEIS should mention the proposed rule to designate critical habitat for wintering piping plovers (*Charadrius melodius)*, is a small North American shorebird listed as threatened when on the Texas Gulf Coast. Laguna Atascosa NWR needs to be added as a refuge protecting sensitive habitat for the piping plover, in recognition of which it has been in scope of the proposed critical habitat for that species.

USFWS-6 An errata sheet will be sent to all recipients of the Technical Support Documents to correct these mistakes. In addition, the Final SPEIS has been revised accordingly.

DSPEIS, Texas Land Border (Volume 2), Section 3.2.7 Threatened/Endangered Species and Critical/Sensitive Habitats - Paragraph two states that "In addition, the Lower Rio Grande Valley National Wildlife Refuge (The Wildlife Corridor) and 26 bird rookeries along the lower coast have been deemed as sensitive habitats (USFWS, 1999)".

Laguna Atascosa NWR and Santa Ana NWR should be added here as sensitive habitats. The DSPEIS should mention the proposed rule to designate critical habitat for an endangered plant, the Zapata Bladderpod (*Lesquerella thamnophila*), which grows in (Starr and Zapata counties), including units of the LRGV NWR.

USFWS-7

An errata sheet will be sent to all recipients of the Technical Support Documents to correct these mistakes. In addition, the Final SPEIS has been revised accordingly.

Thank you for the opportunity to review and provide these comments on the DSPEIS. Be sure that all INS, USBP, and Jtf-6 field units are made aware of the DSPEIS comments, so that required consultations and coordination for federal law compliance and consistency determination purposes will be effectuated. As we have consistently stated in the past, these activities could best be accomplished during the scoping and early processes conducted for all site specific environmental analysis.

USFWS-8

Thank you for your comment.

If project plans change, portions were not reviewed, or differ from our understanding, please notify us. If you have any questions or if we can be of further assistance, please call me at the address on this letterhead and above phone number.

Sincerely,

Ernesto Reyes Jr.

Ernesto Reyes Jr.
Fish and Wildlife Biologist

For
Allan Strand
Acting Field Supervisor

cc:
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Center for Biological Diversity

Sent by facsimile, (817) 978-0200 and (915) 568-8092, hard copy to follow

November 13, 2000

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RE: Joint Task Force-Six Revised Draft Supplemental Programmatic Environmental Impact Statement

Dear Mr. Verwers:

Following are the Center for Biological Diversity's (CBD) comments on the JTF-6 revised draft supplemental programmatic Environmental Impact Statement (SPEIS). The proposed action would "implement full JTF-6 support to INS's mission to gain and maintain control of the southwestern U.S./Mexico border." This support consists of myriad projects, divided into three main categories:

- ***Operational***: listening and observation posts, ground patrols, ground sensors, terrain denial, aerial reconnaissance, forward looking infrared radar, and unmanned aerial vehicle support.

- ***Engineering***: road, bridge, and culvert repair and construction, firing range upgrade and construction, helipad and taxiway upgrade and construction, communication tower installation, building rehabilitation, demolition, and construction, border fence repair and construction, lighting facilities, boat ramp installation, water well and septic system installation, and fitness and training course design and construction.

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● ***General***: transportation of personnel, equipment, and materials (evidentiary or construction), data analysis and processing, training seminars and courses, aerial photography interpretation, translation or decoding of foreign documents, intelligence analysis, and tunnel location and demolition.

JTF-6 activities are part of INS's Integrated and Surveillance and Intelligence Systems (ISIS) program and the SPEIS states the purpose of JTF-6 existence is "to detect, deter, and apprehend drug traffickers" in accordance with the National Defense Authorization Act. Additionally, military personnel are provided with "realistic training needed to prepare for National emergencies." The nature of these emergencies is not addressed.

This is the second draft SPEIS, the first being prepared in 1999. The document states that because of comments on the first SPEIS, the INS and JTF-6 determined that the scope of the analysis was "too broad" and therefore "decided to prepare a more narrow focus." It is not specifically explained how this more narrow focus differs from the first analysis. CBD (then Southwest Center for Biological Diversity) provided extensive comments on the first SPEIS addressing the following issues: range of alternatives, cumulative effects, cumulative effects with a focus on JTF-6 operations and activities in Nogales, Arizona and surrounding vicinity, cumulative effects with a focus on acreage disturbed by JTF-6 activities, affected environment, indirect effects, purpose and need statement, and the relation of the Posse Comitatus Act to JTF-6 operations and activities. These comments are also relevant to the revised SPEIS, and are incorporated by reference. The agency's preferred alternative is the "Full JTF-6 support to INS, including the ISIS program."

With respect to the revised SPEIS, there remains ambiguity as to exactly what is JTF-6's jurisdiction and purpose. Although the SPEIS repeatedly claims that JTF-6 support is provided only for "projects which have illegal drug control purposes," it also contains the much broader statement at page 1-10 that support would be provided for "detecting and deterring illegal activities," without any clarification as to what these "illegal activities" are, or how this highly ambiguous direction abides by the Posse Comitatus Act and additional statutory directives which limit military domestic operations to the "war on drugs." For example, the SPEIS notably fails to mention JTF-6 projects in relation to the Border Patrol's primary mission, immigration enforcement.[1]

It is critical that JTF-6's role in immigration efforts be addressed, as these efforts have

[1] Only indirect reference to immigration is made, such as the statement at page 4-16 that "improvements to roads in the Otay Mountain area in San Diego County, CA, allowed the USBP to conduct their patrol activities more effectively, significantly curtailing the amount of illegal cross-country traffic that was occurring in the area."

CBD-1. Your quote is taken out of context. The correct statement, as presented on page ii of the SPEIS is "The purpose of the JTF-6 support and ISIS projects is to enhance the ability of INS and U.S. Border Patrol (USBP) to detect, deter, and apprehend illegal immigrants and drug traffickers." Also, as indicated on page 1-7, JTF-6 provides assistance and support to law enforcement agencies with counterdrug responsibilities as directed by the National Defense Authorization Act (P.L. 101-510). National emergencies are situations where the US military is needed for combat purposes for National Defense, to protect a foreign entity that is considered of vital strategic or economic resource for the US and/or to provide humanitarian services after natural disasters worldwide.

CBD-2. The Final SPEIS has been revised (Chapter 1) to describe the differences in the two draft documents.

CBD-3. All previous comments made by CBD (then Southwest center for B.D.) have been incorporated into the Administrative Record for consideration by the federal decision maker. INS, JTF-6 reiterate their previous responses to CBD original comments. INS and JTF-6 stand by the responses provided in the Revised Draft SPEIS to the Center for Biological Diversity's original comments.

CBD-4. The word "drug" has been inserted between "illegal" and "activities" in the Final SPEIS. As stated on page 1-8, JTF-6 activities are liminated by the Posse Comitatus Act and by the National Defense Authority Act (P.L. 101-510).

CBD-5. The Posse Comitatus Act and how it is applied is discussed on page 1-8 of the Revised Draft SPEIS.

CBD-6. JTF-6 projects are thoroughly reviewed, prior to approval, to ensure that there is a counterdurg nexus associated with the Support Request. If there is not a nexus, the project is not approved. Indirect benefits to the USBP's effectiveness to control illegal immigration occur since the infrastructure necessary to detect, apprehend and deter illegal drug smugglers are similar to those needed to control illegal entries of any kind. Furthermore, as stated on page 1-6 of the SPEIS, the USBP has become the leading Federal agency in counterdrug operations.

had enormous direct and indirect effects on the borderlands environment.[2] With respect to indirect effects, most notable is the shifting of human migration routes—and ensuing enforcement efforts—from urban centers into remote, biologically diverse, and ecologically fragile lands. Thus, as JTF-6 and the Border Patrol "secure" traditional border crossing areas such as San Diego, El Paso, and Nogales, the human wave of migration has flowed to the remote mountains and canyons east of San Diego, the deserts of western Arizona, and the remote scrublands of Texas. Hundreds of migrants die in these forbidding environments each year.

The shifting tides of human migrants have undoubtedly impacted the ecology of border areas. For example, Border Patrol efforts (very often facilitated by JTF-6 support) in Texas and California have magnified immigration routes into Arizona, specifically in the Douglas area, now the busiest Border Patrol sector in the country. Many important and uniquely designated lands, including the Huachuca Mountains, San Pedro River National Riparian Conservation Area, San Bernadino National Wildlife Refuge, and the Chiricahua Mountains are being impacted by the shifted routes of immigration which have thus far resulted from enforcement efforts.

Exponentially more harmful than migrant impacts, however, is the predictable JTF-6 and Border Patrol missions and projects which follow. For example, the recently released *Environmental Assessment for Infrastructure Within U.S. Border Patrol Naco-Douglas Sector* states that 40 miles of road improvements, seven miles of stadium style lights,16 remote surveillance sites, nine miles of steel landing mat fence, two low water crossings, 6.25 miles of vehicle barrier, and a new Border Patrol station have been or will soon be constructed in the Naco sector alone. JTF-6 has assisted or directly completed many of these projects, and will apparently be camped in the Douglas area this winter to undertake similar efforts. Ominously, one proposed project is the construction of several miles of "border barrier" within Coronado National Monument, a unit of the National Park System.

CBD-7. The Final SPEIS has been revised to address the indirect effects of illegal immigration shifting to more remote areas. It should be noted, however, that this shift a choice made by the smugglers and immigrants and that the INS has no control of their selection of locations for their attempts to gain illegal entry into the US.

CBD-8. These projects are included in the total number and types of projects presented as Table 2-1 of the Revised Draft SPEIS. It should be emphasized that the border barrier project in the Coronado National Monument you mentioned, has not been planned as yet, and thus a Support Request has not been received by JTF-6. If a Support Request is received and approved, a project-specific NEPA document would be prepared and coordinated through the National Park Service, among others.

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[2] The need to address indirect, interrelated, and interdependent environmental effects during the NEPA process is well established by Council on Environmental Quality (CEQ) regulations and judicial interpretations of NEPA. While federal agencies are not responsible for addressing effects which are highly speculative and remote, they must address those that are "reasonably foreseeable." § 1508.8(b), 1502.22(b); Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 777-78 (1983). For example, the regulations specify that indirect effects must be considered in determining the significance of a proposed action, stating that such effects may include growth inducing effects and other induced effects in the pattern of land use, and related effects on air and water and other natural systems. 40 C.F.R. § 1502.16; 1508.8; 1508.25; see also Methow Valley Citizens Council v. Regional Forester, 833 F.2d 810, 816-17 (9th Cir. 1987), rev'd on other grounds, 490 U.S. 332 (1989)(Forest Service consideration of whether to issue permit for proposed ski resort required under NEPA to address development which would be induced by resort); Sierra Club v. Marsh, 769 F.2d 868, 877 (1st Cir. 1985)(Corps' and Federal Highway Administration's finding of no significant impact for proposed construction of cargo port and causeway found inadequate because environmental assessment failed to address probable resulting industrial development); City of Davis v. Coleman, 521 F.2d 661, 679 (9th Cir. 1975)(EIS on proposed highway interchange must address development potential which would result).

Many, if not most, of the remote areas being subjected to increased JTF-6 and Border Patrol personnel, as well as operations and engineering missions, are on federally owned public lands. In Arizona, the percentage of public lands is overwhelming. Despite the presence of a large number of National Parks, Monuments, Forests, Wilderness area, Wildlife Refuges, and a National Riparian Conservation Areas, and many lands administered by the Bureau of Land Management (BLM), the SPEIS completely fails to acknowledge the issue of impacts to uniquely designated areas. In fact, the issue of public lands impacts is absolutely ignored.[3]

CBD-9.

The Final SPEIS has been revised to include a discussion of impacts on public lands and other unique or sensitive areas. It should be noted, however, that the section you referenced is a summary of one subsection of an entire volume Technical Support Document. The Technical Support Documents are a 5-volume series that provides the baseline conditions that are incorporated by reference to the SPEIS.

An additional and fundamental issue raised by the SPEIS lack of candor regarding immigration enforcement is the segmented NEPA analysis currently being conducted by JTF-6 and the Border Patrol (i.e. separate programmatic analysis of Border Patrol operations in Arizona). These two agencies have worked together on literally thousands of missions in the past, and will obviously continue to do so in the future. In fact, the Border Patrol, JTF-6 and other agencies such as the Drug Enforcement Agency have essentially become one super military-civilian conglomerate as the war against drugs and immigrants has intensified. Thus, the analysis of JTF-6 activities and operations in isolation of Border Patrol activities and operations greatly understates the cumulative effects of their collective efforts on the U.S.-Mexico border.

CBD-10.

INS/JTF-6 do not concur that segmentation has occurred. The 1994 PEIS provided full disclosure of all the types of projects that were planned or conceived at that time. Subsequent site- or project-specific NEPA documents were tiered to the 1994 PEIS as projects were identified. This document supplements and updates the 1994 PEIS and is intended to provide continued full disclosure of future projects. Furthermore, INS has subsequently initiated efforts in its McAllen (Texas) and Tucson and Yuma (Arizona) sectors to prepare sector-wide programmatic EISs to address INS/USBP operations and infrastructure projects. These will serve as companion documents to this SPEIS, but would provide a more focused environmental analysis within a more defined geographic area. The infrastructure projects addressed in these documents will be those expected to be completed by JTF-6 units, USBP personnel, General Services Administration, and private contractors. The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus.

In general, the revised SPEIS, like the original SPEIS, provides limited information and analysis to the point of uselessness. For example, an extremely meager three paragraphs is devoted to discussing the preferred alternative's (full support, including the ISIS program) anticipated effects to threatened and endangered species.[4] Most of this "analysis" describes the use of biologists "to survey proposed and alternate routes and locations in order to locate and avoid areas that support protected species." (Page 4.17). This insufficiency of consideration is further amplified by the daunting array of possible JTF-6 missions and the 80 federally listed species which occur along the 2,000 mile border. Despite the large body of scientific research addressing possible environmental effects of these missions—in particular engineering missions such as road construction and re-construction, fence and wall building, and high powered stadium style light installation—there is not one scientific reference or citation provided. Ample studies concerning the many borderland federally listed species are likewise ignored. In fact, the SPEIS does not provide the most basic and fundamental information regarding threatened and endangered species, including a list of those species, the habitats they depend on, the areas of the border they are known to occur, their relation to past and present projects and anticipated relation to future projects, etc. This complete absence of information regarding the effects of JTF-6 activities and operations on threatened and endangered species is a clear violation of Endangered Species Act section 7 consultation requirements as well as section 9 take prohibitions.

CBD-11.

The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Discussions regarding listed species are contained in the Technical Support Documents, which are summarized in the SPEIS, as stated on page 3-1. The Technical Support Documents is a 5-volume series that provides the baseline conditions that are incorporated by reference to the SPEIS. Given the geographic scope and programmatic nature of the SPEIS, it is impossible to identify the potential impacts to a listed species within a specific location. Once a site- or project-specific need is identified, INS/USBP and JTF-6 coordinate with the USFWS and appropriate state agencies during the planning process to document whether a specific project may affect a listed species. If such a determination is made, INS/USBP and/or JTF-6 will modify the project to avoid such impacts or enter into formal Section 7 consultation and submit a Biological Assessment, as required by the ESA.

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[3] Apparently none of these lands qualify as a "unique or sensitive area" as defined at page 3-34 of the SPEIS.

[4] This dearth of analysis is a microcosm of the SPEIS. The "Environmental Consequences" section of the document totals only 34 pages.

Additionally, the cumulative effects analysis in the revised SPEIS continues to be woefully inadequate (please refer to CBD's comments on the original SPEIS for a more thorough discussion of this issue). In responding to these comments, the revised SPEIS states that "although INS and JTF-6 agree that cumulative effects analysis typically include all past and reasonably foreseeable projects," it concludes (without legal reference) that such analysis "would not be meaningful, especially in light of the fact that no specific project locations are currently known" (Response to CBD comments, page 4). This claim, however, is patently false, as evidenced by JTF-6 plans to camp and conduct several projects in the vicinity of Douglas, Arizona this winter and its continuing engineering and support missions in the San Diego vicinity. More generally, it is difficult to believe that JTF-6 and the Border Patrol have not developed short to medium term plans to facilitate their continuing efforts to "secure" the international border. Finally, local law enforcement agency (LLEA) requests for JTF-6 support must be channeled through Operation Alliance and then be given to a particular military unit. It is well known that many of these units rely on, and plan for, the associated infusion of cash associated with these missions and often know their missions well before they are actually executed. In sum, the SPEIS's repeated assertions that a proper cumulative effects analysis cannot be conducted because there is no information regarding future projects is simply not supported by the facts. Under NEPA, reasonably foreseeable impacts must be considered as part of the cumulative effects analysis, and the revised SPEIS has clearly failed to meet this mandate.

CBD-12.

CBD-13.

The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Given the geographic scope and programmatic nature of the SPEIS, it is impossible to identify the potential impacts within a specific location. INS makes every attempt to be proactive in its planning, but must also be somewhat reactive to changes in the smugglers and illegal immigrants modes of operation. Thus the cumulative effects of all Federal, state and local governments, as well as non-governmental organizations would be impossible to address in a document of this scope. The INS/JTF-6 instead will commit to fully address all past, present and reasonably foreseeable future actions within site-specific NEPA documents that can provide a more meaningful and accurate evaluation of cumulative effects.

Site specific NEPA documents were prepared for all activities proposed in the Douglas, Arizona area prior to the initiation of construction, as committed to in the 1994 PEIS and the 1999 Draft SPEIS, and were submitted for public review. INS makes every attempt to be proactive in its planning, but must also be somewhat reactive to changes in the smugglers and illegal immigrants modes of operation. JTF-6 missions are formulated only upon receipt of a support request and approval by Operation Alliance. JTF-6 then solicits assistance from volunteer Active and Reserve duty units from across the nation. Thus, it is nearly impossible for JTF-6 to accurately predict its missions beyond a 1-year time frame.

At page 4-30, the SPEIS lists the number of JTF-6 projects completed between 1994 and 1998. According to this table, JTF-6 has completed approximately 50 road projects, 20 helipads, 15 base operations, 35 training ranges, 20 fences, and 50 engineering assessments. Thus, the approximate 170 engineering projects which JTF-6 completed in these years far outnumbers the 21 projects which have been evaluated in that time, as listed at page 4-29. When was proper NEPA evaluation conducted on the remaining 130 projects? Moreover, the outreach associated with the NEPA analysis which have been conducted has been systematically inadequate. CEQ implementing regulations at § 1500(b) state that NEPA's broad purposes include "insur[ing] that environmental information is available to public officials and citizens before decisions are made" and that "public scrutiny [is] essential to implementing NEPA. To this end, § 1506.6 requires federal agencies to "make diligent efforts to involve the public in preparing and implementing their NEPA procedures," and lists a number of ways to achieve this goal, including mailings to persons or organizations who have expressed interest, publication in local newsletters and newspapers, notice to other media, and notice to state and areawide clearinghouses. JTF-6 has failed to meet this mandate by failing to provide proper notice of its NEPA analysis, by failing to pro-actively develop a permanent mailing list of interested individuals and organizations, and by generally treating NEPA as an obstacle rather than an essential federal statute. The public involvement section of the SPEIS should be amended to include the mailing list for the current NEPA process. Please also include the mailing list which has been used for the various Environmental Assessments (EA) to date. All individuals and organizations which have commented on, or expressed an interest, in the SPEIS should be included in a permanent mailing list for future JTF-6 projects.

CBD-14.

CBD-15.

CBD-16.

The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. The Final SPEIS has been revised to clarify the difference between the table and figure you referenced. It should be noted here however, that the engineering assessments are feasibility studies and, thus, do not require NEPA analyses or documentation.

INS and JTF-6 publish the notices of availability in local and regional newspapers and provide press releases to newspapers and radio and television stations as part of public service announcements. Whether the public service announcements are released are beyond the control of INS and JTF-6. NEPA documents are sent to resource agencies and to organizations or individuals that have expressed interests in receiving such information. In addition, most INS and JTF-6 NEPA documents, including this SPEIS, have been placed on the worldwide web at the Fort Worth District's homepage.

The Final SPEIS has been revised to list all the recipients of hard copies of the SPEIS as Appendix B. (we cannot discern which people/organizations have downloaded the SPEIS from the web site).

The revised SPEIS also continues to provide conflicting information with respect to armed JTF-6 ground patrols. The response to comments states that "no JTF-6 units have been armed since 1997 and that this policy is expected to continue." Other sections of SPEIS, however, directly contradict this statement. For example, the summary sheet states that operational support missions will include both ground patrols and terrain denial. Page 1-11 explains further that "ground patrols [will] involve 10 to 12 military personnel traveling on foot with the intent of discovering illegal drug activities such as the cultivation of marijuana." Will the U.S. military be conducting these missions unarmed?

CBD-17.

JTF-6 stands by the quotation in your comment. In addition, as stated on pages 1-10 and 4-20 of the Revised Draft SPEIS, the JTF-6 units "…rely solely on the USBP agents to provide security for the military personnel." There is no contradiction to this statement in the SPEIS.

Finally, NEPA requires the preparation of an EIS to include a "purpose and need" section, which "briefly specif[ies] the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." 40 CFR § 1502.13. The SPEIS identifies JTF-6's existence as necessary to "eliminate illegal drug activities." Given this proffered purpose and need, the SPEIS must address the cumulative effects, or the success, of JTF-6 and the Border Patrol in achieving these goals thus far. From many accounts, efforts to date have been an unmitigated failure (outlined in greater detail in CBD comments on the original SPEIS). This ongoing failure calls into serious question the validity of the proffered purpose and need section. If no measure of success has been achieved to date, why assume that any will be made in the future?

CBD-18.

Section 1.2 of the Revised Draft SPEIS contains a full description of the purpose and need for the proposed action, at a programmatic level. Detailed descriptions of the purpose and need for specific actions will be provided in site-specific NEPA documents tiered to this SPEIS. The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. INS and JTF-6 disagree with your statement regarding the success in detecting, apprehending, and deterring illegal drug traffickers.

Thank you for this opportunity to comment on the revised draft programmatic Environmental Impact Statement for INS and JTF-6 activities along the U.S-Mexico border. Please send the final EIS when it becomes available.

Sincerely,

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Atlanta Census Office
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November 14, 2000

VIA FACSIMILE AND FIRST CLASS MAIL

Eric W. Verwers
Immigration and Naturalization Service
A/E Resource Center
Attention: CESWF-PM-INS
819 Taylor Street, Room 3A28
Fort Worth, Texas 76102-0300

FAX: 817-978-0200

Re: Revised Draft Supplemental Programmatic Environmental Impact Statement for INS and JTF-6 Activities Along the U.S./Mexico Border

Dear Mr. Verwers:

On behalf of the San Antonio Regional Office of the Mexican American Legal Defense and Educational Fund (MALDEF), I am writing to endorse in substantial form the Comments provided by Lone Star Chapter of the Sierra Club and Frontera Audubon Society ("Comments") on the U.S. Army Corps of Engineers' July 2000 Revised Draft of the Supplemental Programmatic Environmental Impact Statement (SPEIS) for both INS and JTF-6 activities in southern Texas, New Mexico, Arizona, and California. MALDEF does have the following qualifications and perspectives to add to those Comments:

1. MALDEF does not endorse the use of employer sanctions for the hiring of undocumented workers as means of controlling the unregulated flow or migrant workers. We diverge with the Comments in so far as they suggest this as an alternative method for dealing with the flow of undocumented workers. Giving employers responsibilities for enforcement of immigration law has proven detrimental to workers' rights. See Resolution of the AFL-CIO Executive

MALDEF 1-1. Comment noted

Celebrating Our 30th Anniversary
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Committee, February 16, 2000. For MALDEF, a meaningful consideration of alternatives should consider ways to eliminate the distortion of the U.S. labor market caused by the unlawful exploitation of undocumented workers. Enforcing the rights of workers, documented and undocumented, and cracking down on employers who hire immigrants in order to lower labor standards and avoid or violate U.S. labor and employment law, would help correct what is now a distorted labor market, "subsidized" by the exploitation of immigrant workers. Correcting labor market distortions through vigorous enforcement of U.S. labor and employment law would provide the incentive and opportunity to regulate and control the migrant flow. Reform of U.S. immigration policy could then meet the real needs of the U.S. labor market.

MALDEF1-1. cont.

2. Drug interdiction is apparently incidental to the Border Patrol's efforts to prevent unauthorized entries. Yet the patterns and practices of drug traffickers and undocumented immigrants are distinct, and it is both unfair and unwise to confuse the two. Conflating the immigration problem into the drug problem has been used to justify the increased militarization of the border, as well as the vilification of the undocumented immigrant worker. This has had a negative impact on human and civil rights, local communities, and the environment. One federal judge on the Fifth Circuit U.S. Court of Appeals recently decried the erosion of constitutional rights along the border in the name of the government's so-called "War on Drugs" and crackdown on illegal immigration. See *United States v. Ibarra*, 212 F.3d 877 (5th Cir. 2000) (WIENER, J., Dissenting, in a dissent filed separately on August 10, 2000). Activities already engaged in by JTF-6 have led to the tragic killing of one border resident, Ezequiel Hernandez, and forced residents of another border community (Rio Bravo, Texas) to bring suit in an effort to prevent disruption of their environment by the use of heavy machinery in construction and military surveillance flyovers. See *Rio Grande International Study Center, Maria Gonzalez, Guadalupe Elizondo, and David Brask v. U.S. Department of Defense, et al.*, No. L-98-9 (S.D. Tex.), subsequently settled by the parties after the particular JTF-6 mission in dispute was effectively completed. The unfair vilification of the undocumented immigrant has contributed to the rise of vigilantism along the border and the shooting deaths of immigrants such as Eusebio de Haro (See San Antonio Express-News, "Shootings inflaming tensions along border," 5/27/2000). Immigrant deaths from exposure to natural risks have also increased since the implementation of various INS border enforcement operations, without significantly deterring the migrant flow.

MALDEF1-2. Counterdrug operations are one of the top missions of the USBP and as stated on page 1-6 of the Revised Draft SPEIS, "…the USBP also has assumed the major Federal responsibility for illegal drug interdiction."

MALDEF1-3. Comment noted.

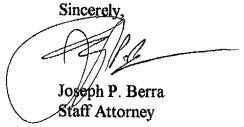
MALDEF1-4. Deaths of persons attempting to illegally breach the US border were addressed on page 4-20 of the Revised Draft SPEIS. Recognizing that such deaths do occur, the USBP has reallocated funds, equipment and personnel for search and rescue operations. This is particularly true during seasons with extreme temperatures. The final SPEIS has been revised to include data on rescue operations.

The confusion of the drug enforcement role and justification of JTF-6 with Border Patrol efforts to stop the undocumented migrant flow also clouds the necessary policy debate that must take place concerning our southern border with Mexico. MALDEF seriously questions whether the proposed projects, surveillance, and

support measures considered by the SPEIS will have a significant, overall impact on curbing the entry of illegal drugs into the U.S. market. The data given by the SPEIS on drug seizures in recent years does not specify whether those seizures were made at or near ports of entry, at other, unauthorized border crossings, or on roads leading away from the border. It is unclear what precise connection the proposed measures will have with the patterns and practices of drug traffickers. In addition, no data is presented on the volume/value of drugs seized by the Border Patrol as a percentage of the total volume/value of drugs making their way into the U.S. market. This makes it difficult to assess the relative impact of drug interdiction by the Border Patrol on the overall drug problem, and whether any potential benefit might be outweighed by the negative effects of the proposed actions. In addition to the negative effects mentioned above and in the Comments, MALDEF is concerned about the potential escalation of border tensions, violence, and even organized criminal activity as an unintended result of or response to the enhanced military presence.

3. MALDEF does not endorse use of the term "illegal alien" when employed by the Comments.

Sincerely,



Joseph P. Berra
Staff Attorney

MALDEF1-5. These data are from apprehension and seizure data provided by the USBP Sectors along the southweste border.

MALDEF1-6. The Final SPEIS has been revised to include this information (NOTE: need statistics from USBP)

MALDEF1-7. Comment noted.

MALDEF1-8. Comment noted.

MALDEF
Mexican American Legal Defense and Educational Fund

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November 22, 2000

VIA FACSIMILE AND FIRST CLASS MAIL
Eric W. Verwers
Immigration and Naturalization Service
A/E Resource Center
Attention: CESWF-PM-INS
819 Taylor Street, Room 3A28
Fort Worth, Texas 76102-0300

FAX: 817-978-0200

Re: Correction to letter of 11/14/00, MALDEF's qualified endorsement of Comments to the Revised Draft Supplemental Programmatic Environmental Impact Statement for INS and JTF-6 Activities Along the U.S./Mexico Border

Dear Mr. Verwers:

With this letter I wish to correct an error in citation contained in my letter of November 14, 2000, concerning MALDEF's qualified endorsement of the Comments submitted by the Lone Star Chapter of the Sierra Club and Frontera Audubon Society ("Comments") on the U.S. Army Corps of Engineers' July 2000 Revised Draft of the Supplemental Programmatic Environmental Impact Statement (SPEIS). In point 2) of my November 14th letter, reference was made to a dissent by Judge Wiener of the Fifth Circuit U.S. Court of Appeals. The proper citation to Judge Wiener's dissent is: *United States v. Zapata-Ibarra*, 223 F.3d 281 (5th Cir. 2000) (WIENER, J., dissenting). The citation given was that of the majority opinion filed in May 2000, with a note that Judge Wiener's dissent was filed later on August 10, 2000. Judge Wiener's dissent may be found at the above Federal Reporter cite.

Please excuse any confusion that may have been caused by the error in citation. Thank you for your attention to this matter.

Sincerely,

Joseph P. Berra
Staff Attorney

Celebrating Our 30th Anniversary
Protecting and Promoting Latino Civil Rights

MALDEF2-1. Comment noted.

SIERRA CLUB

LONE STAR CHAPTER
LOWER RIO GRANDE GROUP

200 East 11th Street
Weslaco, Texas 78596
November 10, 2000

(sent by fax 11-13-00)

Eric W. Verwers
Immigration & Naturalization Service
A/E Resource Center, Attn: CESWF-PM-INS
819 Taylor Street, Room 3A28
Fort Worth, Texas 76102-0300

Re: Revised Draft Supplemental Programmatic Environmental Impact Statement for INS and JTF-6 Activities Along the U.S./Mexico Border

Dear Mr. Verwers:

These comments are on behalf of the Lower Rio Grande Valley Group of the Sierra Club and the Frontera Audubon Society, conservation/environmental organizations with a combined membership of over 700 members here in South Texas.

While we acknowledge the need for an effective INS presence along the U.S. border to deter smuggling and illegal drug entry, our members are overwhelmingly opposed to the militarization of the border which JTF-6 represents. JTF-6's "Operational Support" (listening/observation posts, ground patrols, terrain denials, aerial recon) is both a violation of the U.S. law which prohibits the military from domestic police action, and an open invitation to widespread environmental damage and civil/human rights intimidation. The border is where we live, it is our home. And home to many species of rare, threatened and endangered species of plants and animals, and their habitats. JTF-6, in its own words (page ii) wants to "provide the military units with realistic training." Such training should and must occur on military bases, not along the border where people live and where there are National Parks and Monuments, National Wildlife Refuges and Forests, and Indian Reservations.

Sierra Club and Frontera Audubon believe that this SPEIS is insufficient and inadequate in detailing and discussing both locally specific effects and impacts of the proposed activities, and also the cumulative impacts. We also believe that INS/JTF-6 is in egregious violation of NEPA by already implementing many of the "proposed" actions before completing the NEPA process. For more detailed analysis we refer you to the comments of Howard Crystal of Meyer & Glitzenstein, who represent our organizations in this matter, and who represented us in litigation over INS's "Operation Rio Grande" in South Texas [Defenders of Wildlife, et al v. Doris Meissner, et al].

We strongly feel that the "no action" alternative is the best alternative. The current SPEIS dismisses the "no action" alternative with minimal analysis, saying that this alternative would "not satisfy the purpose and need" of INS, ..."and that the effectiveness of the INS in apprehending illegal drug trafficking would be greatly reduced."(page 2-6) This is patently false and insupportable. For proof one need only look at INS's "Operation Rio Grande"

SC-1. The Posse Comitatus Act is discussed on page 1-9 of the Revised Draft SPEIS. Operational support such as LP/OPS, ground patrols, terrain denials, and aerial reconnaissance, are not prohibited by the Posse Comitatus Act. JTF-6 does not provide or conduct police actions.

SC-2. The realistic training that provided the deployment and redeployment of engineering units and their equipment, which provides valuable experience in engineering operations, logistics and scheduling.

SC-3. The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Given the geographic scope and programmatic nature of the SPEIS, it is impossible to identify the potential impacts within a specific location. INS makes every attempt to be proactive in its planning, but must also be somewhat reactive to changes in the smugglers and illegal immigrants modes of operation. The INS/JTF-6 will commit to fully address all past, present and reasonably foreseeable future actions within site-specific NEPA documents that can provide a more meaningful and accurate evaluation of cumulative effects.

SC-4. INS acknowledges that a settlement has been reached regarding Operation Rio Grande litigation. However, INS and JTF-6 know of only one other project (Laredo Border Road Improvements) that has been challenged relative to violations of NEPA. The courts ruled in favor of the INS and JTF-6 in this litigation.

SC-5. Comment noted.

SC-6 While the No Action alternative does not satisfy the purpose and need, it is carried forward for analysis, along with the other viable alternatives, rather than being dismissed.

which INS/BP has repeatedly called a success. Here in South Texas, INS with "Operation Rio Grande" has been able to more than double the number of BP agents, utilize advanced technology (motion & heat sensors, remote video cameras, night vision scopes, etc.), some floodlights in non-environmentally sensitive areas, and necessary environmentally compatible infrastructure, **all without any participation or involvement of JTF-6**.

JTF-6 is unneeded and unwanted along the border. INS can do and is doing its job effectively without JTF-6. We urge selection of the "no action" alternative, Alternative 5. Thank you for this opportunity to comment.

Sincerely,

Jim Chapman
LRGV Group, Sierra Club

Mary Lou Campbell
Frontera Audubon Society

SC-7 Although it is true that JTF-6 has not participated in Operation Rio Grande, JTF-6 has supported the McAllen Sector USBP by providing road improvements, fences, light installation, firing and training range development, and boat ramps. All of these infrastructure projects have facilitated the success of the McAllen Sector and Operation Rio Grande.

SC-8 Comment noted.

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Post Office Box 640
Albuquerque, New Mexico 87103

IN REPLY REFER TO:

November 22, 2000

ER 00/763

U.S. Army Corps of Engineers
Fort Worth District
ATTN: CESWF-PM-INS (Eric Verwers)
PO Box 17300
Fort Worth, Texas 76102-0300

Dear Mr. Verwers:

The U.S. Department of the Interior has reviewed the Revised Draft Supplemental Programmatic Environmental Impact Statement (EIS) for INS and JTF-6 Activities along the U.S./Mexico Border, July 2000. Previously, we provided you comments on August 10, 1998 and August 11, 1998 (ER 98/595) on the Notice of Intent and May 18, 1999 (ER 99/268) on the Draft Supplemental Programmatic EIS prepared March 1999. In this regard, please consider these comments, as appropriate, and the following comments as you proceed with future environmental analyses and documentation.

Sections 2.8 and 2.8.3 - We remain concerned that this document does not identify specific primary, secondary and cumulative impacts that will occur within specific geographical areas. The Department of the Interior, through our Bureaus, administers and manages many American Indian trust and allotted lands, public lands and subsurface Federal mineral estate, water resources projects, National parks, monuments, historical sites and recreation areas, National wildlife refuges and many other cultural and biological resources not on Federally-administered land; we manage approximately 40 percent of the land base along the U.S.-Mexico border. Therefore, as a prelude to any land and/or resource disturbing activity, the proposed project proponent should contact and consult with the Department of the Interior to develop, in part, site-specific preventative and mitigating measures. Please contact this Office at the above address or telephone (505) 766-3565 for a listing of our Bureau offices along the border.

USDI-1

The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Given the geographic scope and programmatic nature of the SPEIS, it is impossible to identify the potential impacts within a specific location. INS makes every attempt to be proactive in its planning, but must also be somewhat reactive to changes in the smugglers and illegal immigrants modes of operation. Likewise, JTF-6 reacts to the needs of INS and thus, cannot predict where projects may occur over the next five years.

USDI-2

INS and JTF-6 routinely coordinate with the appropriate USDOI and other Federal and state agencies prior to initiation of a project regarding potential impacts and to develop mitigation measures.

Section 4.5.3, Threatened and Endangered Species, 4th paragraph, last sentence - The sentence reads "INS and JTF-6 will continue to coordinate with the USFWS . . ." We recommend replacing this sentence with: "INS and JTF-6 will continue to coordinate with the appropriate U.S. Fish and Wildlife Service field office to address potential impacts to species proposed or listed as threatened or endangered (including reintroduction or recovery efforts) during the pre-planning stages and/or prior to undertaking site-specific activities related to the preferred alternative."

USDI-3

The FSPEIS has been revised accordingly.

Thank you for the opportunity to provide these and reiterate our May 18, 1999 comments. We trust these comments will be of use during future documentation development.

Sincerely,

Glenn B. Sekavec
Regional Environmental Officer

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO

OFFICE OF THE COMMISSIONER
UNITED STATES SECTION

NOV 1 3 2000

Eric W. Verwers
Assistant Director
Immigration and Naturalization Service
Architect-Engineer Resource Center
Attn: CESWF-PM-INS
819 Taylor Street, Room 3A28
P.O. Box 17300
Fort Worth, TX 76102-0300

Dear Mr. Verwers:

Staff members of the United States Section of the International Boundary and Water Commission (USIBWC) have reviewed the "Revised Draft Supplemental Programmatic Environmental Impact Statement (SPEIS) for the Immigration and Naturalization Service (INS) and Joint Task Force Six (JTF-6) Activities Along the United States/Mexico Border" prepared by the U.S. Army Corps of Engineers (USACE), Fort Worth District, in July 2000. As requested, we offer the following comments for use in preparing the final document.

Section 2.8.1, pages 2-8 through 2-13, International Boundary and Water Commission, revise section to read:

"The International Boundary and Water Commission, United States and Mexico (IBWC) is a bilateral organization between the respective State Departments of the U.S. and Mexico. The IBWC was permanently established by the Convention of 1889 as the International Boundary Commission (IBC), and was given its present name by the Treaty of 1944. The IBWC is composed of a United States Section and a Mexican Section, headquartered in El Paso, Texas and Ciudad Juarez, Chihuahua, respectively. An Engineer Commissioner appointed by their respective president heads each Section. The function of the IBWC is to oversee the implementation of the numerous boundary and water treaties and related agreements between the U.S. and Mexico. Along the 674 miles of land boundary between El Paso, Texas and San Diego, California, the IBWC is charged with ensuring the permanence of the boundary monumentation which includes periodically inspecting, repairing/replacing, and resurveying the monuments. International agreements specify that access to, and line-of-sight between all monuments will not be obstructed. Satisfying this agreement usually required that border fences and other constructed works be constructed along an alignment which is offset a distance from the international boundary, and that additional offset be provided, and access gates be installed, in the vicinity of the boundary monuments. Limited technical investigative authority is given to the USIBWC through U.S. Statutes; under this authority the USIBWC asks that U.S. developement

The Commons, Building C, Suite 310 • 4171 N. Mesa Street • El Paso, Texas 79902
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IBWC-1. The Final SPEIS has been revised accordingly.

near the international land boundary not alter existing surface drainage patterns and characteristics.

The river boundary between the U.S. and Mexico follows the centerline of the channels of the Rio Grande along 1,254 miles of boundary between El Paso, Texas, and the Gulf of Mexico, and along 24 miles of the Colorado River in the vicinity of Yuma, Arizona. Along these portions of the international boundary, the IBWC is charged through the numerous treaties and agreements with determining national ownership of waters flowing in the rivers, and preventing unnatural movement of the river channel (and thus the border) through gradual erosion of the channel banks, or sudden avulsion of the entire channel. Water ownership is determined using a series of flow gages strategically located along the river reaches. The IBWC attempts to prevent unnatural erosion or avulsion of the river channel by jointly reviewing all plans for construction within the floodplains of the rivers, and prohibiting construction which is technically shown to affect river flows.

The USIBWC also operates and maintains the U.S. portions of a number of international flood control projects along the Rio Grande. These projects contain infrastructure such as levees, diversion dams, control weirs and drop structures. Land upon which this infrastructure is located, as well as the bed and banks of the river and (for some projects) the floodplain, are owned or otherwise controlled by the USIBWC. Two international multipurpose dams are located on the Rio Grande. These dams are the Amistad Dam near Del Rio, Texas and the Falcon Dam near Zapata, Texas. The U.S. portions of these dams and associated upstream reservoirs are owned, operated, and maintained by the USIBWC. Finally, the USIBWC is involved in several international waste water treatment plants in several border cities. Proposed activities in the U.S. which have the potential to affect operation and/or maintenance of the flood control projects, the multipurpose storage dams and associated reservoirs, or the wastewater treatment plants must be approved, and in some cases, licensed by the USIBWC.

Growing emphasis on protection of the environment and endangered species in all government activities has prompted the USIBWC to reach an agreement with the U.S. Fish and Wildlife Service (USFWS) regarding a vegetated wildlife travel corridor along the Rio Grande in the Lower Rio Grande Valley of Texas. This agreement ensures the establishment of a wildlife travel corridor of native vegetation in prescribed areas along the Rio Grande. Pursuant to Section 7 of the Endangered Species Act, the USFWS issued a biological opinion in May 1993 on the impacts of the USIBWC's maintenance of the international Lower Rio Grande Flood Control Project on federally listed endangered species. Although the agreement is specifically for USIBWC's maintenance area in the general vicinity of Brownsville, Texas and Matamoros, Tamaulipas, the USIBWC is committed to coordinate with the USFWS in all areas along the Rio Grande and Colorado River to assure the protection of native habitat that can be used as a wildlife corridor. Any activity proposed that could potentially affect native habitat along the rivers should be coordinated with the USFWS during initial planning stages to prevent adverse impacts to the corridor and endangered species."

Page iii, Move General Support item "5. Tunnel location and demolition" to Engineering Support category.

IBWC-2 The Final SPEIS has been revised accordingly.

Table of Contents, Correct page numbering for Sections 1.3.2.3 to 1.5. Within the document, change page numbers "2-13 through 2-19" to "2-14 through 2-20" and correct the table of contents.

IBWC-3. The Final SPEIS has been revised accordingly.

Page 1-18, Section 1.3.2.11, Add information on how the tunnel location and demolition projects are carried out. For the demolition, are explosives used? Is fill brought in? What are the impacts to groundwater? What if the tunnel is in an existing storm drain or has become a conveyance for water? We are interested in all aspects of the demolition, dewatering activities, and waste disposition.

IBWC-4. The Final SPEIS has been revised accordingly.

Page 2-16, Table 2-3: The Ysleta del Sur Reservation is located in El Paso County, not Hudspeth as indicated in the table.

IBWC-5. The Final SPEIS has been revised accordingly.

Page 3-13, Section 3.2.7, 2nd paragraph: According to the July 22, 1997 *Federal Register* publication of the Final Rule for southwestern willow flycatcher (SWF), the only states with designated critical habitat are New Mexico, Arizona, and California. The reference to SWF habitat should be changed to read: "... designated critical habitat **potentially** exists ..." for that species in Texas.

IBWC-6. The Final SPEIS has been revised accordingly.

Page 3-14, Section 3.2.8, Add a new paragraph: "The reach of the Rio Grande between Presidio and Fort Quitman, Texas is known as the IBWC Boundary Preservation Project. Recommendations to preserve the character of this reach were adopted by the United States and Mexico in December of 1976 under IBWC Minute No. 262. Recommendations include a general prohibition against construction within 100 feet of the international boundary, and a provision for a 25-foot vegetated strip along each river bank within this reach."

IBWC-7. The Final SPEIS has been revised accordingly.

Page 3-21, Section 3.3.8, 2nd paragraph, 1st sentence: Suggest this sentence be omitted. It leads the reader to think the entire length of the Rio Grande is designated as a wild and scenic river. The reference on page 3-14, Section 3.2.8 is correct that only the 119.2-mile segment from Big Bend National Park downstream to the Terrell-Val Verde county line is the designated reach.

IBWC-8. The Final SPEIS has been revised accordingly.

Page 4-1, Section 4.1.1, 4th paragraph, after the 3rd sentence: Update this section to include "Beginning in 2003, under Phase II of the National Pollutant Discharge Elimination System (NPDES) Storm Water Program, small construction activities disturbing one acre or greater will also require a SWPPP."

IBWC-9. The Final SPEIS has been revised accordingly.

As project needs are identified and site-specific NEPA documents tiered to this SPEIS are prepared, please ensure that sufficient information is provided to us to make a determination on whether or not there would be transboundary drainage and pollution impacts or structures limiting our access to monumentation. We will evaluate these projects for impacts associated with our operation and maintenance activities, flood flows, and line-of-site between the monuments. Please provide detailed site drawings, cross-sections, profiles, and drainage calculations for proposed structures and improvements. Again, no works which will obstruct or divert flood flows will be approved. We are interested in specific schedules for field activities and request coordination with the appropriate USIBWC Field Offices (an updated list is

IBWC-10. Comment noted. INS and JTF-6 will continue to coordinate with the USIBWC during the planning stages of a project and prior to construction.

IBWC-11. Comment noted. INS and JTF-6 will continue to coordinate with the USIBWC during the planning stages of a project and prior to construction.

attached). Information regarding the on-going maintenance, repair, and responsibility for the constructed works and facilities is also requested.

The USIBWC will coordinate with the Mexican Section for those proposed activities in the vicinity of the international boundary. Again, we would appreciate adequate information and time for both Sections to review the proposed project. In your response to our comments in the revised draft SPEIS, you request assistance from the USIBWC in receiving reciprocal information from the Mexican Section of the IBWC for projects that may affect the INS and/or JTF-6 areas of operation. We will make an effort to notify you of these types of projects as information is made available to us.

Please send two copies of NEPA documents of this nature to my attention for review and coordination. We thank you for the opportunity to review the draft document and appreciate your continued coordination with our agency regarding these activities. Please contact me at (915) 832-4740 if you have any questions.

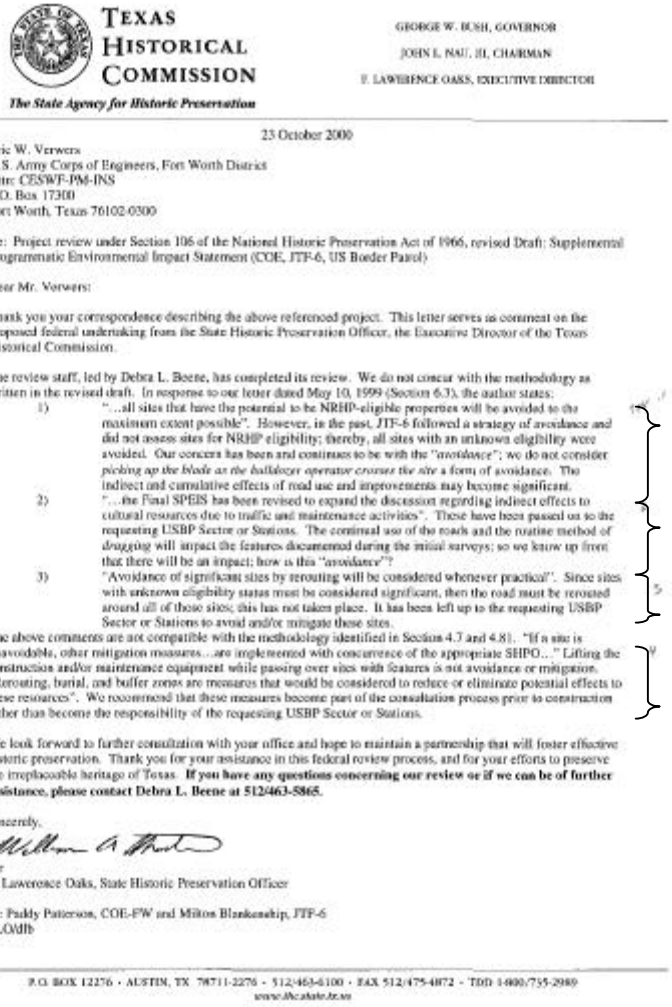
Sincerely,

Sylvia A. Waggoner
Division Engineer
Environmental Management

Division

Attachment: (1)
As stated

IBWC-12. Comment noted. Thank you for your continued cooperation.



TEXAS HISTORICAL COMMISSION

The State Agency for Historic Preservation

GEORGE W. BUSH, GOVERNOR
JOHN L. NAU, III, CHAIRMAN
F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

23 October 2000

Eric W. Verwers
U.S. Army Corps of Engineers, Fort Worth District
Attn: CESWF-PM-INS
P.O. Box 17300
Fort Worth, Texas 76102-0300

Re: Project review under Section 106 of the National Historic Preservation Act of 1966, revised Draft: Supplemental Programmatic Environmental Impact Statement (COE, JTF-6, US Border Patrol)

Dear Mr. Verwers:

Thank you your correspondence describing the above referenced project. This letter serves as comment on the proposed federal undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by Debra L. Beene, has completed its review. We do not concur with the methodology as written in the revised draft. In response to our letter dated May 10, 1999 (Section 6.3), the author states:

1) "...all sites that have the potential to be NRHP-eligible properties will be avoided to the maximum extent possible". However, in the past, JTF-6 followed a strategy of avoidance and did not assess sites for NRHP eligibility; thereby, all sites with an unknown eligibility were avoided. Our concern has been and continues to be with the "*avoidance*"; we do not consider *picking up the blade as the bulldozer operator crosses the site* a form of avoidance. The indirect and cumulative effects of road use and improvements may become significant.

2) "...the Final SPEIS has been revised to expand the discussion regarding indirect effects to cultural resources due to traffic and maintenance activities". These have been passed on to the requesting USBP Sector or Stations. The continual use of the roads and the routine method of *dragging* will impact the features documented during the initial surveys; so we know up front that there will be an impact; how is this "*avoidance*"?

3) "Avoidance of significant sites by rerouting will be considered whenever practical". Since sites with unknown eligibility status must be considered significant, then the road must be rerouted around *all* of those sites; this has not taken place. It has been left up to the requesting USBP Sector or Stations to avoid and/or mitigate these sites.

The above comments are not compatible with the methodology identified in Section 4.3 and 4.81. "If a site is unavoidable, other mitigation measures...are implemented with concurrence of the appropriate SHPO..." Lifting the construction and/or maintenance equipment while passing over sites with features is not avoidance or mitigation. "Rerouting, burial, and buffer zones are measures that would be considered to reduce or eliminate potential effects to these resources". We recommend that these measures become part of the consultation process prior to construction rather than become the responsibility of the requesting USBP Sector or Stations.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your assistance in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Debra L. Beene at 512/463-5865.**

Sincerely,

for
F. Lawerence Oaks, State Historic Preservation Officer

cc: Paddy Patterson, COE-FW and Milton Blankenship, JTF-6
FLO/dlb

P.O. BOX 12276 • AUSTIN, TX 78711-2276 • 512/463-6100 • FAX 512/475-4872 • TDD 1-800/735-2989
www.thc.state.tx.us

The roads that are used by the USBP, and proposed for upgrade or improvements by JTF-6, are existing roads that are used constantly by the general public and/or private ranchers. Thus, potential impacts from vehicles and equipment are an everyday occurrence. INS and JTF-6 will consider testing for eligibility determination on a project-by-project basis. For on-going and future projects, INS and JTF-6 will make every attempt to avoid sites and will consider evaluation methods, as appropriate, where avoidance is not practical.

THC-1.

The roads that are used by the USBP, and proposed for upgrade or improvements by JTF-6, are existing roads that are used constantly by the general public and/or private ranchers. However, INS/USBP has initiated efforts in its McAllen (Texas) and Tucson and Yuma (Arizona) sectors to prepare sector-wide programmatic EISs to address INS/USBP operations, such as dragging, and infrastructure projects. These will serve as companion documents to this SPEIS, but would provide a more focused environmental analysis within a more defined geographic area.

THC-2.

THC-3. INS and JTF-6 will consider testing for eligibility determination on a project-by-project basis.

INS and JTF-6 will consider testing for eligibility determination on a project-by-project basis, but still contend that lifting the blade when approaching sites, rerouting the road, or burial of sites along existing roads should be considered mitigation.

THC-4.

November 21, 2000

Eric W. Verwers
U.S. Department of Justice
Immigration and Naturalization Service
A/E Resource Center
819 Taylor Street, Room 3A28
Fort Worth, TX 76102-0300

RE: Supplemental Programmatic Environmental Impact Statement for INS and JTF-6 Activities along the U.S./Mexico Border

Dear Mr. Verwers:

Thank you for coordinating with this agency in your planning activities regarding the implementation of enforcement activities within a 50-mile corridor along the U.S./Mexico Border. Texas Parks and Wildlife Department (TPWD) staff have reviewed the Draft Environmental Impact Statement (DEIS) and offer the following comments concerning this project.

The Supplemental Programmatic Environmental Impacts Statement (SPEIS) addresses the potential cumulative impacts of INS and JTF-6 activities. Projects considered in the SPEIS include operational, engineering, and general support for curtailing illegal immigration and drug smuggling activities along the U.S./Mexican border. Operational projects include establishing and utilizing listening and observation posts, ground patrols, ground sensors, terrain denial, and aerial reconnaissance. Engineering projects include repair and construction of road, bridges, culverts, firing ranges, helipads, taxiways, communication towers, border fences, lighting facilities, boat ramps, water wells, septic systems, and fitness and training courses. General support includes transportation of personnel, equipment, and materials; data analysis and processing; training seminars and courses; aerial photography interpretation; translation or decoding of foreign documents; intelligence analysis; and tunnel location and demolition.

Given the small proportion of public versus private land in Texas, the Texas Biological and Conservation Data System (BCD) includes less than a representative inventory of rare resources in many areas of the state. Although the information included in the BCD is based on the best data available to the state regarding rare species, the data from the BCD do not provide a definitive statement as to the presence or absence of rare or threatened and endangered (T&E) species within your project areas. The BCD information and our comments are intended to assist you in avoiding harm to species that may occur in your study areas.

TPWD-1. INS and JTF-6 appreciate the valuable information provided.

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512-389-4800
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The BCD has numerous known occurrence records for rare species along and within the 50-mile wide corridor encompassing the project areas. Enclosed you will find listings for rare species for the counties bordering the Rio Grande. Some of the county listings have been updated since your 1998 county listing request. All other county lists are currently undergoing revision. A 50-mile wide corridor along the Rio Grande would extend beyond the initial bordering counties in a few areas along the south end of the study area. During the scoping process for any particular project, please contact Celeste Brancel-Brown at (512) 912-7011 to confirm you are working with the most current county listing and the most applicable listings for the project.

TPWD-2. INS and JTF-6 will continue to contact the TPWD regarding listed species. We appreciate the information regarding the appropriate point of contact.

TPWD appreciates the consideration given by the Joint Task Force Six (JTF-6) to identify techniques to minimize impacts, restore sites degraded by project activities, and use supplemental projects to enhance resources as mitigation for impacts that cannot be avoided. We recommend that the enhancement measures be designed to more directly benefit native and rare species. For example, on page 4-13 of the SPEIS, it was noted that abandoned roads were allowed to naturally revegetate. TPWD recommends implementing revegetation techniques to minimize the establishment of non-native invasive species. These activities should be monitored to determine the efficacy of the revegetation techniques.

TPWD-3 Comment noted. As indicated in sections 5.1 and 5.4 of the revised DSPEIS, INS and JTF-6 is committed to complying with Section 7(a)(1) requirements to enhance protection and conservation of listed species.

It is understood that funding, projects, and mid-term objectives will change throughout the 5-year period this plan is written to cover. However, without a site-specific description of proposed projects, consideration of cumulative impacts from projects occurring in close proximity to one another will be lost to the narrower focus of each individual project. Therefore, TPWD recommends including a section in each individual, site specific NEPA document to discuss the cumulative impacts of completed and planned projects in the surrounding areas.

TPWD-4. The INS/JTF-6 is committed to fully addressing all past, present and reasonably foreseeable future actions within site-specific NEPA documents in order to provide a more meaningful and accurate evaluation of cumulative effects than can be presented in a programmatic EIS of this scope.

With the uncertainty in forecasting projects, it is understandable that JTF-6 is uncomfortable with planning any large-scale mitigation efforts. However, for mitigation efforts to work successfully, restoration and enhancement projects should be implemented before the adverse impacting actions are executed. Mitigation directly enhancing rare species located within Chihuahuan desert scrublands should be planned. It should be kept in mind that cactus species, the primary type of rare plant impacted, typically require more than 2 years of monitoring to determine recovery. Providing adequate training to field personnel regarding the natural histories of rare and T&E wildlife will help to reduce the potential for impacts to rare species. TPWD encourages the JTF-6 to continue with its staff educational program.

TPWD-5. Comment noted.

Since previous years included seven lighting projects, adequate monitoring data should be available to form some understanding of the impacts to rare wildlife.

TPWD-6. INS and JTF-6 have not initiated monitoring studies to evaluate the effects of lighting on wildlife. We will however, provide under separate cover a bibliography of research that has been performed in recent years relative to lighting impacts.

TPWD would like to request a report of the preliminary findings of the research conducted to date on the impacts of lighting to both large and small rare species.

The SPEIS didn't mention the possibility of installing co-located communications equipment. Although in remote areas this may not be possible, co-locating equipment on established communication towers in developed areas would be feasible and would reduce the number of towers.

TPWD-7. The Final SPEIS has been revised to incorporate this as a potential mitigation measure.

You should be aware of flight operation parameters conducted by pilots of this Department. Department wildlife surveys and law enforcement flights are conducted under VFR flight rules with single and multiengine STOL type aircraft at altitudes of 100' – 300' AGL. These flights typically operate from sunrise to 11:00 a.m. and from 6:00 p.m. to dark at airspeeds below 100 knots and on routes which follow lines of longitude and latitude by dead reckoning, GPS, or loran over an entire county. The wildlife survey flights occur primarily during the months of August, September, and October. Department aircraft are also used for night law enforcement surveillance during November, December, and January under VFR flight rules at altitudes of 3000' – 4000' and at airspeeds below 150 knots.

TPWD-8. Comment noted.

The study area encompasses several areas that are managed by TPWD. No activities should occur on TPWD lands without detailed coordination and assessment of potential impacts to fish and wildlife resources on these lands. Please contact David Riskin at (512) 389-4897 for any activities occurring on TPWD lands.

TPWD-9. INS and JTF-6 will continue to contact the TPWD regarding TPWD lands. We appreciate the information regarding the appropriate point of contact.

The description of activities involving the construction of boat ramps along the Rio Grande indicates the potential for the disturbance of State-owned streambeds. Such work would require a permit from this Department under Chapter 86, Parks and Wildlife Code. Contact Rollin MacRae at the letterhead address or at (512) 389-4639 for additional information on the required permit.

TPWD-10. INS and JTF-6 will continue to contact the TPWD regarding waterways and streambeds. We appreciate the information regarding the appropriate point of contact.

I appreciate the opportunity to review and comment on this project.

Sincerely,

Danny Allen
Wildlife Habitat Assessment Program
Wildlife Division

DLA:pmo.8127

Via Fax and Mail

November 13, 2000

Mr. Eric Verwers
U.S. Army Corps of Engineers
Fort Worth District
ATTN: CESWF-PM-INS
P.O. Box 17300
Fort Worth, TX 76102

U.S. Immigration and Naturalization Service
Facilities and Planning
425 I Street NW
ATTN: Ms. Debra Hood
Washington, D.C. 20536

U.S. Joint Task Force Six
ATTN: Staff Engineer J-3 Milton Blankenship
Building 11603
Biggs AAF
Fort Bliss, TX 79916-0058

Re: Revised Draft Supplemental Programmatic Environmental Impact Statement (SPEIS), Proposed JTF-6 Support Services to INS

Dear Mr. Verwers, Ms. Hood, and Mr. Blankenship:

These comments are submitted on behalf of Defenders of Wildlife (Defenders). Defenders is a national non-profit, public-interest organization with over 400,000 members and supporters. Defenders works to preserve the integrity and diversity of natural ecosystems, prevent the decline of native species, and restore threatened habitats and wildlife populations.

Thank you for the opportunity to comment on the draft Supplemental Programmatic Environmental Impact Statement (SPEIS) for Proposed JTF-6 Support Services to INS in Texas, New Mexico, Arizona and California. Defenders has a long-standing interest in the natural environs of the border regions of the southwestern United States, such as the Sonoran pronghorn antelope, flat-tailed horned lizard, Mexican wolf and many other native plants, animals and their habitats. Activities of the Immigration and Naturalization Service (INS), the Border Patrol (BP) and JTF-6 have significant adverse impacts on these species and their habitat; it is our belief that these comments will inform the selection of an alternative, discussion of environmental

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consequences and mitigation measures for the SPEIS and subsequently tiered NEPA documentation.

A Programmatic EIS on INS Activities is Also Required

The INS and BP must also prepare a SPEIS on their immigration and drug interdiction activities along the U.S.-Mexico border, as a companion to this one for JTF-6 activities. In 1994, INS and JTF-6 prepared a joint Programmatic Environmental Impact Statement (EIS) and the 1999 SPEIS also covered both agencies. This revised document, on the other hand, "focuses on JTF-6 support provided to the INS rather than address all actions by both agencies." (SPEIS at iii.) Therefore, since the SPEIS at issue here covers implementation of JTF-6 support for INS and BP projects over the next five years, there must also be an EIS covering implementation by INS and BP for these projects.

INS and BP activities that must be covered in an additional SPEIS include vegetation clearing, mowing, vehicular and foot traffic as well as the increase in these and other activities resulting from expanding ranks of BP agents in the Southwest. The environmental consequences of INS and BP operations must be analyzed. Only when this is complete can there be a comprehensive evaluation of the cumulative impacts of INS/BP's strategy for operational activities and infrastructure projects over the next five years. (SPEIS at 1-1.)

Separation of INS/BP and JTF-6 Activities

Similarly, the final SPEIS must make a clearer demarcation between INS projects and those aspects which JTF-6 plan to implement. The final must also make clear, particularly in regard to roads, the mileage of new roads versus upgrade of older roads. Table 2-1 is an excellent example. First, it is not at all apparent whether the proposed road projects are new roads, roads to be upgraded, or those to be evaluated for upgrading. The confusion arises when one turns to page 1-12, and learns that up to 2,115 miles are expected to be upgraded during the next 5 years. Since it matches no number in Table 2-1, is this in addition to those estimates in the table?

Also, because Table 2-1 lists engineering activities to support BP's mission, one presumes that they will be implemented by JTF-6. However, responses to several comments on the 1999 SPEIS state that JTF-6 does not maintain or operate drag roads, yet they are listed in Table 2-1. This leaves open the question of whether JTF-6 has any responsibility for drag roads, the maintenance and operation of which is particularly harmful to numerous plant and animal species due to the large swaths of vegetation that are destroyed. Discrepancies such as these obscure the true impacts of the proposed activities and are difficult to discover in a 6 volume document.

Cumulative Impacts Analysis

DOW-1 Comment noted. INS/USBP has initiated efforts in its McAllen (Texas) and Tucson and Yuma (Arizona) Sectors to prepare sector-wide programmatic EISs to address INS/USBP operations and infrastructure projects. These will serve as companion documents to this SPEIS, but would provide a more focused environmental analysis within a more defined geographic area. Consideration will continue to be given to preparing companion documents for other Sectors as individual situations dictate.

DOW-2 INS makes every attempt to be proactive in its planning, but must also be somewhat reactive to changes in the smugglers and illegal immigrants modes of operation. Likewise, JTF-6 reacts to the needs of INS and thus, cannot predict which projects they may perform for INS. In addition, JTF-6 relies on voluntary support from Active and Reserve units across the nation. Thus, JTF-6 support at a given location for a specified location cannot be assured beyond a 1-year time frame.

DOW-3 INS/IUSBP cannot accurately predict the number of miles of new roads that will be needed over the next five years. However, as indicated on page 1-14 of the Revised Draft SPEIS, about 55 miles of new roads have been constructed since 1989, compared to 1,517 miles of roads that have been upgraded, or less than four percent of the road projects have been new road construction. The 2,115 miles is a typographical error, which should have been 2,116 miles, the sum of the patrol road improvements (1,951 miles) and drag roads (165 miles). This error has been corrected in the FSPEIS.

DOW-4 The drag roads presented in Table 2-1, titled "Proposed USBP Projects by State, are expected to be constructed or upgraded. JTF-6 does not maintain or operate drag roads; this is a USBP operation.

The SPEIS must identify cumulative impacts from all past, present and reasonably foreseeable future actions, not just INS projects supported by JTF-6. CEQ regulations define cumulative impacts as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. This draft SPEIS explicitly aims to do the opposite by limiting the analysis to cumulative impacts from INS projects. (SPEIS at 1-20.) In light of the numerous federal, state, private and tribal land management entities along the U.S.-Mexico border, the identification and analysis of the cumulative impacts is crucial. In order to achieve this essential aspect of a programmatic impact statement, this SPEIS must be amended before issuance of a final.

DOW-5

The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus. Given the geographic scope and programmatic nature of the SPEIS, it is impossible to identify the potential impacts within a specific location. INS makes every attempt to be proactive in its planning, but must also be somewhat reactive to changes in the smugglers and illegal immigrants modes of operation. Thus the cumulative effects of all Federal, state and local governments, as well as non-governmental organizations would be impossible to address in a document of this scope. The INS/JTF-6 instead will commit to fully address all past, present and reasonably foreseeable future actions within site-specific NEPA documents that can provide a more meaningful and accurate evaluation of cumulative effects.

Endangered Species Act Compliance

The Final SPEIS incorporates no INS or JTF-6 policies or procedures for complying with the Endangered Species Act (ESA), Section 7 in particular. Under the ESA, 16 U.S.C. §§ 1531 et seq., the INS is required to determine whether the proposed activity "may affect," adversely modify critical habitat of, or result in the take of listed or proposed species. If so determined, JTF-6 must consult with the Fish and Wildlife Service (FWS) in order to ensure that their actions do not jeopardize listed species and to obtain a biological opinion and incidental take authorization. A failure to do so is a violation of the ESA.

DOW-6

INS/USBP and JTF-6 coordinate with the USFWS and appropriate state agencies during the planning process for each specific action to document whether that specific project may affect a listed species. If such a determination is made, INS/USBP and/or JTF-6 will modify the project to avoid such impacts or enter into formal Section 7 consultation and submit a Biological Assessment, as required by the ESA.

Section 9 of the ESA prohibits 'take' of endangered or threatened species, 16 U.S.C. § 1538(a)(1), defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, or capture, or collect, or [] attempt to engage in any such conduct." 16 U.S.C. § 1532(19). In addition, Section 7 of the ESA states that all federal agencies "shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes [of the ESA] by carrying out programs for the conservation of endangered species." 16 U.S.C. § 1536(a)(1). Section 7 also requires that, "[e]ach federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species." 16 U.S.C. § 1536(a)(2). Therefore, each federal agency is required to determine whether its activities 'may affect' a listed species, by preparing a biological assessment, and to enter into 'formal consultations' with the FWS upon such a finding. In short, not only must the INS and JTF-6 avoid 'take' of listed species, but they also must ensure that their actions do not "jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat." 50 C.F.R. § 402.14(g)(4).

DOW-7

As mentioned in the response above, INS/USBP and JTF-6 coordinate with the USFWS and appropriate state agencies during the planning process to document whether a specific project may affect a listed species. Formal Section 7 consultation is usually obviated by redesigning projects to eliminate the potential of effects on listed species. No actions taken by INS/USBP or JTF-6 to date have been determined by the USFWS to have jeopardized the continued existence of a listed species.

Since 1989, INS and INS have been involved in 3 "accidents" involving listed species. It is not clear from the draft SPEIS whether those accidents resulted in (or potentially resulted in) 'takes' of listed species, but it must be made clear that INS and JTF-6 are required to do more than avoid "accidents" or "incidents." (4-15.) Federal agencies have the affirmative obligation to conserve listed species as well as the duty to avoid adverse modification of critical habitat, avoid reducing the likelihood of survival and recovery of listed species, and avoid 'take' of listed

species. Increased construction of roads, buildings, fences, light posts and the resultant increase in vehicular traffic and human presence will directly, indirectly and cumulatively impact listed species. The SPEIS must detail how INS and JTF-6 plan to comply with the ESA.

DOW-8

Accidents are never planned. All practicable measures are taken to avoid accidents. To date, however, incidental take of listed species has occurred only as a result of these three accidents. JTF-6 coordinated immediately with the appropriate Federal and state agencies to resolve these issues, as stated on pages 4-16 and 4-17 of the revised DSPEIS.

According to the draft SPEIS, INS and JTF-6 merely submit their NEPA documents to FWS. This is not the equivalent of a biological assessment, and severely hinders INS and JTF-6 compliance with the ESA. Instead, INS and JTF-6 should involve FWS in the earliest stages of NEPA compliance, particularly for site-specific NEPA, so that the alternative most protective of the survival and recovery of listed species is part of the NEPA process. In this way, INS and JTF-6 can be sure not to eliminate project options that may be necessary during the development of a biological opinion.

DOW-9

INS and JTF-6 routinely request information and guidance regarding listed species from the USFWS and appropriate state resource agency at the on-set of the NEPA planning process. Copies of this correspondence are included as an appendix to every site-specific NEPA document to demonstrate this effort. In addition, copies of the draft NEPA documents are also submitted to these agencies for their review prior to the final decision and initiation of the project.

Additional Comments

Section 2.1.1 must elaborate on what types of operational support services are no longer in use, in order for the reader to fully understand the usefulness of various alternatives and the impacts of the activities. For example, most operational support services have not been provided in the past three years. It should follow that Alternative 4, which is the same as the preferred alternative yet without operational support, is as preferable and viable an alternative, yet is dismissed because BP's effectiveness would be reduced without operational support. The final SPEIS must answer how this can be true when BP has not employed this support for nearly 3 years.

DOW-10

The list of operational support activities that currently require approval from the Secretary of Defense (SECDEF) is presented in the first paragraph of section 1.3 of the revised DSPEIS. SECDEF approval does not imply that such missions are no longer used or that they will not be implemented in the near future. Operational support activities do enhance the USBP's effectiveness and, thus, are considered an advantage over their absence. Still, Alternative 4 (no operational support) is considered a viable alternative and was carried forward for complete evaluation rather than being dismissed.

Table 2-4 must be revised to include these additional federal environmental requirements:

- The Wilderness Act, 16 U.S.C. §§ 1131-1136;
- Arizona Desert Wilderness Act;
- National Wildlife Refuge System Administration Act, 16 U.S.C. §§ 668dd-668ee; and
- National Wildlife Refuge System Improvement Act of 1997, P.L. 105-57.

DOW-11

The Final SPEIS has been revised accordingly.

Conclusion

Thank you again for this opportunity to comment on the revised draft SPEIS. Please send all subsequent public notices or documents concerning this programmatic EIS to me, and please contact me at 202-682-9400 x119 if you have any questions in this matter.

Sincerely,

Karn Gillon
Wildlife Counsel

STATE OF CALIFORNIA-THE RESOURCES AGENCY GRAY DAVIS, Governor

DEPARTMENT OF FISH AND GAME

South Coast Region
4949 Viewridge Avenue
San Diego, California 92123
(858) 467-4201
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November 13, 2000

Mr. Eric Verwers, Assistant Director
INS A/E Resource Center
819 Taylor Street, Room 3A28
Fort Worth, Texas 76102-0300

Comments on the Revised Draft Supplemental Programmatic Environmental Impact Statement (SPEIS) for the Immigration and Naturalization Service (INS) use of Joint Task Force-Six (JTF-6) Support for Activities Occurring in a 50-mile Corridor Along the United States/Mexico Border
(September 20, 2000-1)

Dear Mr. Verwers:

The Department of Fish and Game (Department) has reviewed the draft SPEIS that we received on September 20, 2000 for the proposed use of JTF-6 support to conduct INS activities occurring in a 50-mile corridor along the United States/Mexico border. The Department is identified as a Trustee Agency pursuant to the California Environmental Quality Act (CEQA) Section 15386 and is responsible for the conservation, protection, and management of the state's biological resources.

The project proposes to implement full JTF-6 support to help achieve INS's mission to gain and maintain control of the southwestern United States/Mexico border. JTF-6 activities are grouped into three support service categories:

Operational Support:
1. Listening and observation posts
2. Ground patrols
3. Ground sensors
4. Terrain denial
5. Aerial reconnaissance, Forward Looking Infrared Radar, and Unmanned Aerial Vehicle Support

Engineering Support:
1. Road, bridge, culvert repair and construction
2. Firing range upgrade and construction
3. Helipad and taxiway upgrade and construction
4. Communication tower installation
5. Building rehabilitation, demolition, and construction
6. Border fence repair and construction

7. Lighting facilities
8. Boat ramp installation
9. Water well and septic system installation
10. Fitness and training course design and construction

General Support:

1. Transportation of personnel, equipment, and materials
2. Data analysis and processing
3. Training seminars and courses
4. Aerial photography interpretation
5. Translation or decoding of foreign documents
6. Intelligence analysis
7. Tunnel location and demolition

The proposed project will impact habitats across Texas, New Mexico, Arizona and California. This letter will address only those impacts occurring within California and more specifically San Diego County (County). According to the SPEIS seven vegetation communities will be impacted by the proposed project including chaparral, coastal sage scrub, desert, needle-leaved evergreen forest, broad-leaved forest, graminoid, and coastal complexes. Within California, 80 Federally listed species occur within the project site. Of these, 52 are listed as endangered, 14 proposed endangered, eight as threatened, and six as proposed threatened. A total of 46 California state listed species also occur within the project site including 36 endangered and 10 threatened species. An additional eight species are considered rare. At this time impacts to sensitive habitats and species cannot be quantified due to the general nature of the SPEIS and a lack of specific proposed projects.

We offer the following comments and recommendations:

Whether JTF-6 should provide the operational, engineering and general support to INS is beyond the Department's scope of evaluation. Direct impacts to sensitive species and habitats will occur regardless of who is chosen to carry-out the support activities. Our concerns will therefore, focus on the impacts of the proposed support activities and not who will be responsible for their implementation.

This project will impact proposed or existing preserve lands within the Multiple Habitat Planning Area (MHPA) of the Multiple Species Conservation Program (MSCP). The MSCP is a comprehensive habitat conservation planning program that addresses multiple species habitat needs and the preservation of native vegetation communities within a 900-square mile area in the southwestern section of the County. It is one of three subarea planning efforts in the County that contributes to preservation of regional biodiversity through coordination with other habitat conservation planning efforts throughout southern California. The JTF-6 activities would impact

CDFG-1. The Final SPEIS has been revised to include clarification of the purpose, scope and intent of a Programmatic EIS, as defined by NEPA and CEQ. A PEIS generally contains less detail and less quantification than an EA/EIS for a specific project or action, and usually does not involve complex quantitative analyses. Subsequent EAs/EISs can be tiered to the PEIS and need only to reference the PEIS and summarize relevant issues, allowing the individual EA or EIS to concentrate on the specific action at its focus.

CDFG-2. Comment noted.

lands designated as "Public Lands and Dedicated Private Open Space" under the County's subarea plan. "Take" of listed species and habitat is not allowed within this area. Under the City of San Diego's subarea plan this same area was designated a Core Biological Resource Area. Core Resource Areas are defined as areas that have a high concentration of sensitive biological resources which, if lost, could not be replaced or mitigated elsewhere. The MSCP does allow for some preserve boundary adjustments, however, given the sensitivity of the biological resources found in this area, the Department recommends that the JTF-6 activities be modified to the greatest extent practicable in order to avoid and/or minimize impacts to this area. Once the minimization has been accomplished, the Department recommends that mitigation be in the form of in kind land purchases that can be added to the existing preserve to ensure maintenance of overall acreage and biological function of the MSCP.

The statement that only seven vegetation communities exist within the study area is misleading. Classification of natural communities in California generally follows Holland (1986). Under this classification scheme vernal pools, marshes, and riparian habitats are considered separate vegetation communities. We recommend that a vegetation map be created, based on Holland (1986), for the 50-mile corridor showing where specific projects might be expected to occur and what vegetation communities would be directly impacted.

One vegetation community not listed in the SPEIS was vernal pool. Vernal pools are one of the most sensitive habitats in southern California. Use of JTF-6 will likely result in impacts to this habitat. Riparian woodlands is another wetland habitat that has been significantly reduced and occurs along the United States/Mexico Border. Mitigation measures for the loss of these sensitive habitats must be addressed on a project by project basis.

The Department is responsible for ensuring the conservation of wetland and riparian habitats and opposes any alteration of a natural watercourse that would result in a reduction of wetland acreage or wetland habitat values. Alterations include, but are not limited to: conversion to subsurface drains, placement of fill or building of structures within the wetland and channelization or removal of materials from the streambed. All wetlands and watercourses, whether intermittent or perennial, should be retained and provided with substantial setbacks which preserve the riparian and aquatic values and maintain their value to on-site and off-site wildlife populations. A formal wetland delineation following U.S. Army Corps of Engineers (ACE) protocol may also be necessary prior to any construction in wetland or riparian habitats. Please note, however, that wetland and riparian habitats subject to the Department's authority may extend beyond the areas identified in the ACE delineation. We recommend that the project avoid wetland impacts; or if that cannot be achieved than effectively mitigate for the impacts.

The Department appreciates the opportunity to comment on your project. If you have any questions or comments pertaining to this letter, please contact Christine Collier of the Department at (858) 467-4207.

CDFG-3 Comment noted. INS and JTF-6 will continue to coordinate with the Department regarding listed species and MSCP lands. Avoidance to any sensitive resource is INS and JTF-6's preferred mitigation measure.

CDFG-4 INS and JTF-6 acknowledge that there are numerous and varied habitat types throughout California. Volume 5 (Section II.2.0) of the Technical Support Documents states that more than 30 community types have been delineated by some authors. However, due to the large geographic scope of the SPEIS, broad descriptions of vegetation formations, rather than definitive locale-specific habitats is more practicable. Volume 5 discusses that there are four major vegetation formations along the project corridor and that these four formations can be further subdivided into numerous vegetation communities. These Technical Support Documents have been updated for this supplement for the original 1994 PEIS.

CDFG-5 INS and JTF-6 acknowledge that vernal pools and riparian woodlands are valuable and sensitive vegetative communities. Due to the geographic scope of the SPEIS, it would not practical to list all vegetative communities along the 2,800- x 50-mile corridor. Avoidance to these and any sensitive resource is INS and JTF-6's preferred mitigation measure.

CDFG-6 Comment noted. Avoidance to wetlands and other sensitive resource is INS and JTF-6's preferred mitigation measure. If avoidance is not practicable, INS and JTF-6 will coordinate with the appropriate agencies to develop a mitigation or compensation plan.

Sincerely,

William E. Tippets

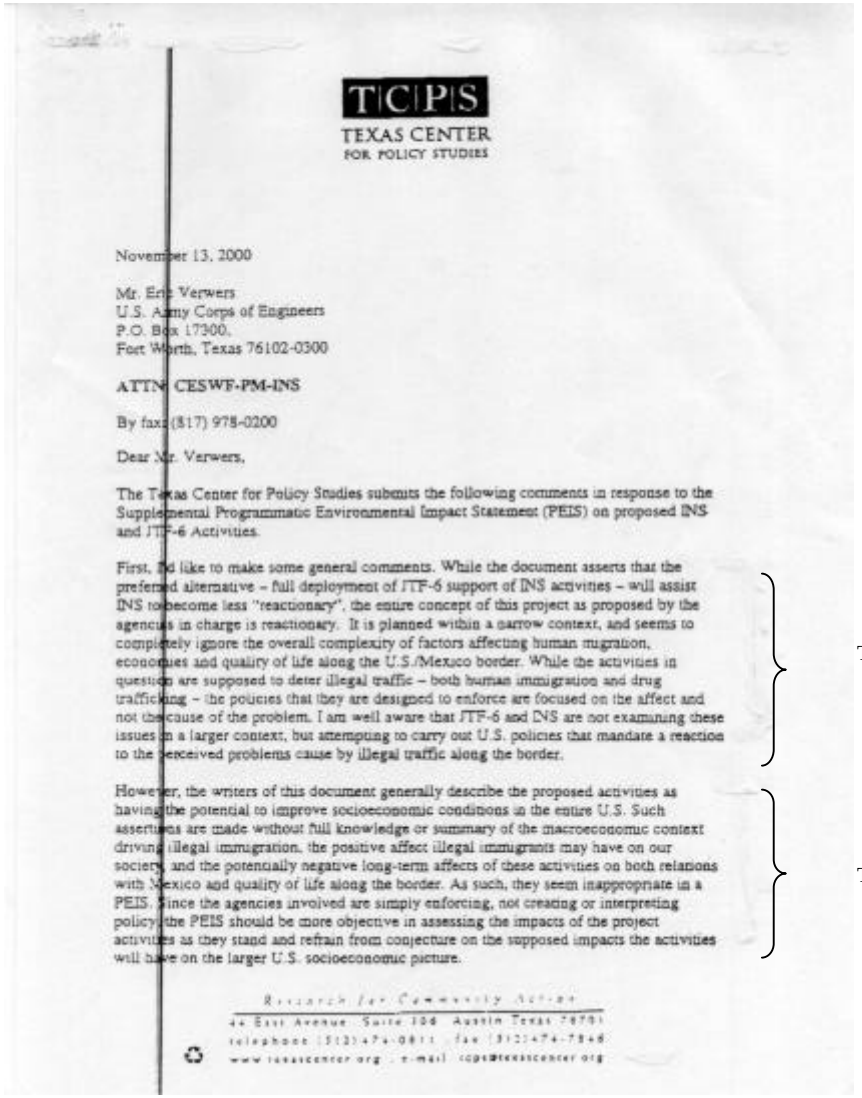
William E. Tippets
Habitat Conservation Supervisor
California Department of Fish and Game

cc:

U.S. Fish and Wildlife Service

U.S. Army Corps of Engineers

State Clearinghouse



TCPS
TEXAS CENTER
FOR POLICY STUDIES

November 13, 2000

Mr. Eric Verwers
U.S. Army Corps of Engineers
P.O. Box 17300,
Fort Worth, Texas 76102-0300

ATTN: CESWF-PM-INS

By fax (817) 978-0200

Dear Mr. Verwers,

The Texas Center for Policy Studies submits the following comments in response to the Supplemental Programmatic Environmental Impact Statement (PEIS) on proposed INS and JTF-6 Activities.

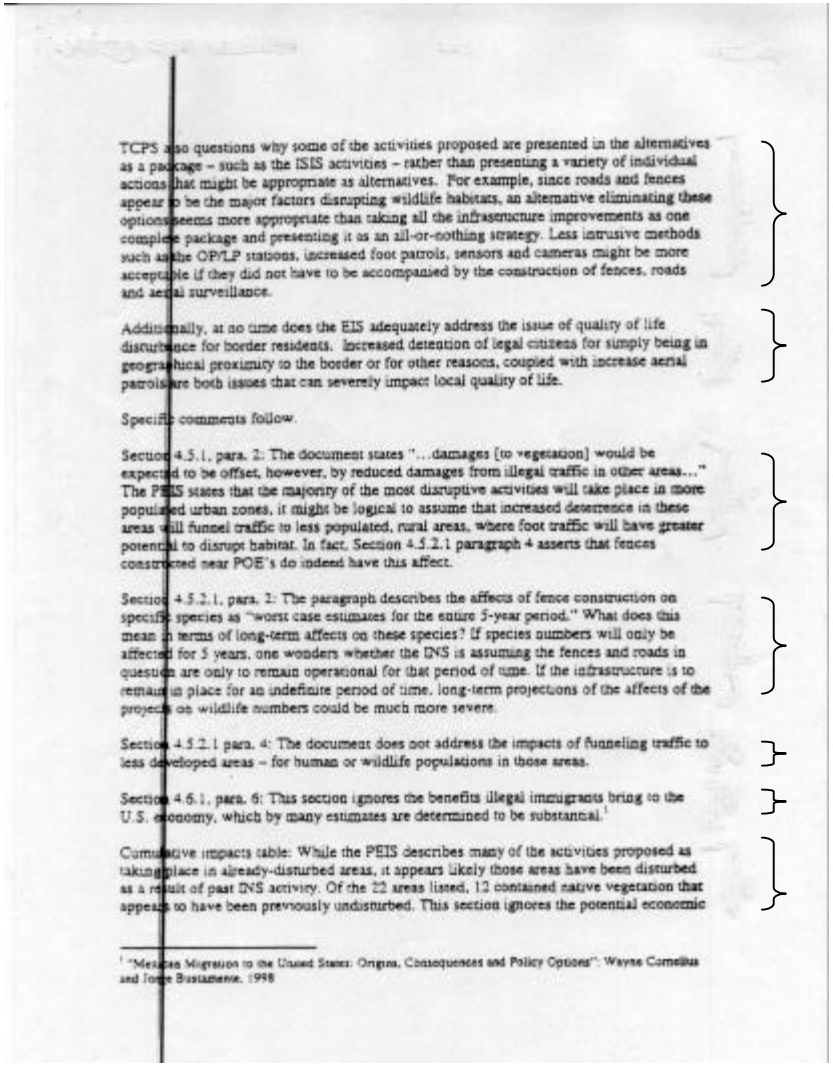
First, I'd like to make some general comments. While the document asserts that the preferred alternative – full deployment of JTF-6 support of INS activities – will assist INS to become less "reactionary", the entire concept of this project as proposed by the agencies in charge is reactionary. It is planned within a narrow context, and seems to completely ignore the overall complexity of factors affecting human migration, economies and quality of life along the U.S./Mexico border. While the activities in question are supposed to deter illegal traffic – both human immigration and drug trafficking – the policies that they are designed to enforce are focused on the affect and not the cause of the problem. I am well aware that JTF-6 and INS are not examining these issues in a larger context, but attempting to carry out U.S. policies that mandate a reaction to the perceived problems cause by illegal traffic along the border.

TCPS –1 Thank you for your comment.

However, the writers of this document generally describe the proposed activities as having the potential to improve socioeconomic conditions in the entire U.S. Such assertions are made without full knowledge or summary of the macroeconomic context driving illegal immigration, the positive affect illegal immigrants may have on our society, and the potentially negative long-term affects of these activities on both relations with Mexico and quality of life along the border. As such, they seem inappropriate in a PEIS. Since the agencies involved are simply enforcing, not creating or interpreting policy, the PEIS should be more objective in assessing the impacts of the project activities as they stand and refrain from conjecture on the supposed impacts the activities will have on the larger U.S. socioeconomic picture.

TCPS-2 Thank you for your comment.

Research for Community Action
44 East Avenue Suite 106 Austin Texas 78701
telephone (512) 474-0811 fax (512) 474-7846
www.texascenter.org e-mail tcps@texascenter.org



TCPS also questions why some of the activities proposed are presented in the alternatives as a package – such as the ISIS activities – rather than presenting a variety of individual actions that might be appropriate as alternatives. For example, since roads and fences appear to be the major factors disrupting wildlife habitats, an alternative eliminating these options seems more appropriate than taking all the infrastructure improvements as one complete package and presenting it as an all-or-nothing strategy. Less intrusive methods such as the OP/LP stations, increased foot patrols, sensors and cameras might be more acceptable if they did not have to be accompanied by the construction of fences, roads and aerial surveillance.

TCPS-3

If each of the components of each JTF-6 support group were considered as a separate alternative and in combination with the other support groups, over 100 alternatives and alternative combinations would have to be addressed, which would render the SPEIS useless. Instead, INS and JTF-6 have evaluated the different combinations of support services that would satisfy the purpose and need of both INS and JTF-6 and have identified (in Section 2.1 of the SPEIS) the various types of alternatives that need to be considered when developing future site- or project-specific NEPA documents.

Additionally, at no time does the EIS adequately address the issue of quality of life disturbance for border residents. Increased detention of legal citizens for simply being in geographical proximity to the border or for other reasons, coupled with increase aerial patrols are both issues that can severely impact local quality of life.

TCPS-4

Operational activities such as apprehension and detention, are beyond the scope of this SPEIS. The primary focus of this SPEIS is the support provided by JTF-6 to INS for infrastructure projects.

Specific comments follow.

Section 4.5.1, para. 2: The document states "…damages [to vegetation] would be expected to be offset, however, by reduced damages from illegal traffic in other areas…" The PEIS states that the majority of the most disruptive activities will take place in more populated urban zones, it might be logical to assume that increased deterrence in these areas will funnel traffic to less populated, rural areas, where foot traffic will have greater potential to disrupt habitat. In fact, Section 4.5.2.1 paragraph 4 asserts that fences constructed near POE's do indeed have this affect.

TCPS-5

The SPEIS states that most fences would be (and have been) constructed in populated areas. The vast majority of the construction activities, as indicated in the SPEIS, have occurred in remote areas for which the USBP needs adequate and safe access or vehicle barriers. Fences and vehicle barriers do reduce the impacts caused by illegal traffic and reduces the USBP enforcement footprint, as is currently being experienced by the San Diego Sector where portions of a secondary barrier system have been installed.

Section 4.5.2.1, para. 2: The paragraph describes the affects of fence construction on specific species as "worst case estimates for the entire 5-year period." What does this mean in terms of long-term affects on these species? If species numbers will only be affected for 5 years, one wonders whether the INS is assuming the fences and roads in question are only to remain operational for that period of time. If the infrastructure is to remain in place for an indefinite period of time, long-term projections of the affects of the projects on wildlife numbers could be much more severe.

TCPS-6

This paragraph and the associated tables do not describe effects to specific species; rather they attempt to quantify the potential losses to groups of animals (e.g., lizards, birds, small mammals). The long-term effect to these groups, as discussed in the SPEIS, is the permanent loss or alteration of habitats.

Section 4.6 of the SPEIS discusses the possibility of migrants attempting to illegally enter the US in remote areas. Impacts to wildlife populations and habitat from these activities are discussed in Section 4.5 of the SPEIS.

Section 4.5.2.1 para. 4: The document does not address the impacts of funneling traffic to less developed areas – for human or wildlife populations in those areas.

TCPS-7

Section 4.6.1, para. 6: This section ignores the benefits illegal immigrants bring to the U.S. economy, which by many estimates are determined to be substantial.[1]

TCPS-8

Analyses such as these are beyond the scope of this SPEIS and would not address the purpose and need of the proposed action.

Cumulative impacts table: While the PEIS describes many of the activities proposed as taking place in already-disturbed areas, it appears likely those areas have been disturbed as a result of past INS activity. Of the 22 areas listed, 12 contained native vegetation that appears to have been previously undisturbed. This section ignores the potential economic

TCPS-9

Page 1-13 of the Revised Draft SPEIS, about 55 miles would of the 1,517 miles of road projects that have been constructed since 1989 have been new roads. New roads would typically be the only types of construction activities that could potentially affect non-disturbed habitat. Road improvements, fences, training ranges, etc. would typically occur within developed areas and/or previously disturbed areas. INS/JTF-6 is not "…continuing to degrade them [disturbed areas] simply because they've already been degraded." Rather, INS requires infrastructure projects to fulfill its mission and Congressional mandate, and INS/JTF-6 attempt to minimize potential adverse impacts by siting these facilities in disturbed areas, thus avoiding productive, native habitats.

[1] "Mexican Migration to the United States: Origins, Consequences and Policy Options": Wayne Cornelius and Jorge Bustamente, 1998

benefits of restoring these areas to ecological health, rather than continuing to degrade them simply because they've already been degraded.

In summary, the document ignores the increasingly recognizable and sizable impact that wildlife habitat contributes to local economies in the form of nature tourism and quality of life factors. Particularly in places like the Lower Rio Grande Valley, the Wildlife Corridor and associated anchor refuges provide the last stronghold for endangered and threatened species in an increasingly urbanized zone, as well as species that provide enormous benefits in terms of drawing tourism to the region. The PEIS also ignores the very real potential for decreased aesthetic values along the border as a result of additional lights, fences, roads and ground and foot patrols. TCPS finds the PEIS severely lacking in both respects.

TCPS recommends adopting the "No Action Alternative", or presenting additional alternatives that would allow for JTF-6 organizational support and limited ISIS activities but not full deployment of the road and fence infrastructure projects.

Thank you for considering these comments.

Sincerely,

Karen Chapman
Assistant Director

TCPS-9
Cont.

TCPS-10 The Final SPEIS has been revised to address the effects on eco-tourism.

TCPS-11 Effects to aesthetics were discussed in Section 4.6 of the SPEIS.

TCPS-12 Thank you for your comment.

SAN XAVIER DISTRICT
OF THE
TOHONO O'ODHAM NATION
2015 WEST SAN XAVIER ROAD • TUCSON, ARIZONA 85746
TELEPHONE: (520)294-5727 • FAX: (520)294-0038

October 5, 2000

U.S. Department of Justice
Immigration and Naturalization Service
Attention: CESWF-PM-INS, Eric Verwers,
819 Taylor Street, Room 3A28
P.O. Box 17300
Fort Worth, TX 76102-0300

Dear Mr. Verwers:

I hereby request a copy of the CD of the Revised Draft SPEIS and baseline documents from the Fort Worth District.

Please send the copy of CD to the above address.

Thank you in advance for this request.

Sincerely,

Connie Rios for

Austin G. Nunez, Chairman
San Xavier District

file

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO

OFFICE OF THE COMMISSIONER
UNITED STATES SECTION

September 19, 2000

Eric Verwers
Assistant Director, INS A/E Resource Center
Attention: CESWF-PM-INS
819 Taylor Street, Room 3A28
P.O. Box 17300
Fort Worth, Texas 76102-0300

Dear Mr. Verwers:

This is in reference to your letter dated September 12, 2000, regarding the Revised Draft Supplemental Programmatic Environmental Impact Statement (SPRIS) for the Immigration and Naturalization Service.

Our agency, the International Boundary and Water Commission, United States Section, is interested in obtaining a copy of the compact disc (CD). Please send the CD to the following address.

Hector A. Maynes
IBWC, U.S. Section
2616 West Paisano Drive
El Paso, Texas 79922

I thank you in advance for your prompt attention to this request.

Sincerely,

Hector A. Maynes
Project Manager, URGP

The Commons, Building C, Suite 310 • 4171 N. Mesa Street • El Paso, Texas 79902
(915) 832-4100 • (FAX) (915) 832-4190

San Diego
ASSOCIATION OF
GOVERNMENTS

401 B Street, Suite 800
San Diego, CA 92101-4231
(619) 595-5300 • Fax (619) 595-5305
www.sandag.cog.ca.us

September 19, 2000

Mr. Eric Verwers
INS A/E Resource Center
Attn: CESWF-PM-INS
819 Taylor Street, Room 3A28
Fort Worth, TX 76102-0300

Dear Mr. Verwers:

Thank you for the notice of the availability of the Revised Draft SPEIS for the INS/Joint Task Force-Six activities on the U.S. border with Mexico.

We would like to have the Revised Draft SPEIS and the revised Environmental Baseline Documents on compact disc. Please send the CD to:

Ms. Nan Valerio
Senior Regional Planner
San Diego Association of Governments
401 B Street, Suite 800
San Diego, CA 92101

If you have any questions about this request, or about the SANDAG review process for environmental documents, please contact me at (619) 595-5365 or by e-mail at nva@sandag.org. Thank you.

Sincerely,

Nan Valerio

NAN VALERIO
Senior Regional Planner

NV/jdk

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

In Reply Refer To:
ER 00/763

OCT 17 2000

Mr. Eric Verwers
Assistant Director
Immigration and Naturalization Service
A/E Resource Center
819 Taylor Street, Room 3A28
Fort Worth, Texas 76102-0300

Dear Mr. Verwers:

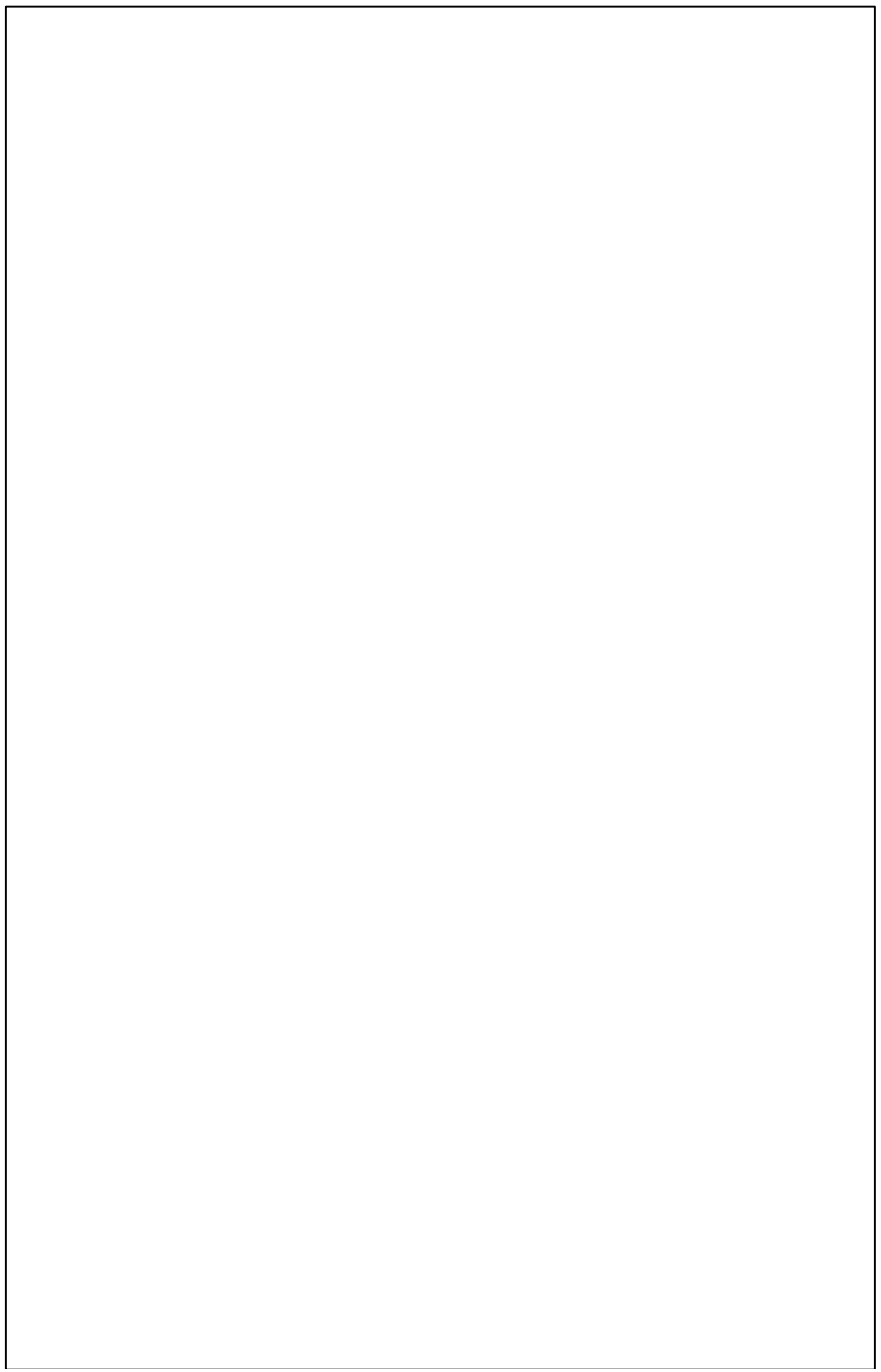
This is in regard to the Department of the Interior's comments for the revised draft supplemental programmatic EIS for the INS/JTF-6 Activities along the U.S/Mexico Border.

This is to inform you that the Department may have comments, but will be unable to reply before the comment deadline. Please consider this letter as a request for an extension of time in which to comment on the document.

Our comments, if any, should be available by late November 2000.

Sincerely,

Terence N. Martin
Team Leader
Natural Resources Management
Office of Environmental Policy
and Compliance



7.0 LIST OF PREPARERS

Table 7-1, presented below, lists the people who were primarily responsible for preparing this Programmatic Environmental Impact Statement:

Table 7-1. List of Preparers

NAME	AGENCY/ ORGANIZATION	DISCIPLINE/ EXPERTISE	EXPERIENCE	ROLE IN PREPARING EIS
Mr. Kevin Feeney	INS (Lead Agency)	Environmental Planning	20 years, EIS/EAs for Federal Projects	INS Environmental Office Program Manager
LTC. Steve Tennant	JTF-6 (Cooperating Agency)	Civil Engineering	18 years U.S. Army Corps of Engineers NEPA Compliance – Base Closure Program	JTF-6 Staff Engineer, Study Manager
LTC. Mike Rossi, P.E.	JTF-6 (Cooperating Agency)	Civil Engineering	17 years U.S. Army Corps of Engineers NEPA compliance – Base Closure Program	JTF-6 Project Officer
Mr. Milton Blankenship	JTF-6 (Cooperating Agency)	Geology/ Biology	9 years NEPA Compliance—JTF-6; 18 years experience in geology and HAZMAT management and geohydrology	JTF-6 Environmental Coordination, Project Manager
Mr. Eric Verwers	Fort Worth District Corps of Engineers	Biology	12 years environmental impact assessment for Federal projects.	Fort Worth District Corps of Engineers, Program Manager
Ms. Linda Ashe	Fort Worth District Corps of Engineers	Biology/ Ecology	4 years NEPA and related studies	Fort Worth District Corps of Engineers, Project Manager
Ms. Patience E. Patterson	Fort Worth District Corps of Engineers	Archeology	28 years archeology, regulatory cultural resources management, and historical preservation	Fort Worth District Corps of Engineers, Project Archeologist

SECTION 7.0
LIST OF PREPARERS

NAME	AGENCY/ ORGANIZATION	DISCIPLINE/ EXPERTISE	EXPERIENCE	ROLE IN PREPARING EIS
Mr. Bill Hill	Pacific Western Technologies (PWT)	Environmental Science	5 years NEPA studies; 30 years environmental investigations	PWT Project Coordinator
Mr. Larry Pearce	PWT	Geography	25 years planning	PWT Project Manager
Mr. Bob Moyer, E.I.T.	PWT	Environmental Engineering	18 years water and air studies; 5 years NEPA studies	Air and water quality; soils, and hazardous waste evaluations
Mr. Chris Ingram	Gulf South Research Corporation (GSRC)	Biology/ Ecology	22 years NEPA and related environmental studies	Study Manager, Formulation of Alternatives, Biological Evaluation, Public Involvement, Review
Ms. Suna Knaus	GSRC	Biology/ Forestry	13 years biological investigations and NEPA studies	Wetlands and Natural Resources
Mr. Steve Smith	GSRC	Biology/ Range Conservation	6 years biological investigations and NEPA studies	T&E Species and Natural Resources
Ms. Kelli Backstrom	GSRC	Socioeconomics	8 years economic analyses and NEPA studies	Socioeconomic Resources
Mr. Jerry Bolton	GSRC	Biology/ Ecology	12 years biological investigations and NEPA studies	Biology/Baseline Evaluations, Study Review
Mr. John Lindemuth	GSRC	Archaeology	6 years archeological investigations and NEPA studies	Archeology and Historic Resources

SECTION 8.0
LIST OF ACRONYMS & ABBREVIATIONS

8.0 LIST OF ACRONYMS AND ABBREVIATIONS

A.D.	=	Anno Domini (in the year of the Lord)
ADEQ	=	Arizona Department of Environmental Quality
AIC	=	Agency Information Consultants
a.m.	=	ante meridiem (before noon)
AMTRAC	=	National Railroad Passenger Corporation
A.O.U.	=	American Ornithologists Union
AQCR	=	Air Quality Control Regions
AR	=	Army Regulation
ARMS	=	Archaeological Records Management System
B.C.	=	Before Christ
BTEX	=	Benzene, Toluene, Ethylene, Xylene
BIA	=	U.S. Bureau of Indian Affairs
BLM	=	U.S. Bureau of Land Management
BOR	=	U.S. Bureau of Reclamation
B.P.	=	Before Present
CAAA	=	Clean Air Act Amendments
CAP	=	Central Arizona Project
CARB	=	California Air Resources Board
CX	=	Categorical Exclusion
CCMP	=	Comprehensive Conservation and Management Plan
CEQ	=	Council on Environmental Quality
CERCLA	=	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	=	CERCLA Information System
CFR	=	Code of Federal Regulations
CO	=	Carbon Monoxide
CRM	=	Cultural Resource Management
CTC	=	Cradle of Texas Conservancy, Inc.
dB	=	Decibels
dBA	=	Decibels on the A-weighted scale
DDD	=	Dichloro diphenyl dichloroethane
DDE	=	Dichloro diphenyl ethylene
DDT	=	Dichloro diphenyl trichloroethane
DLEA	=	Drug Law Enforcement Agencies
DoD	=	Department of Defense
DU	=	Ducks Unlimited
E	=	Endangered or Endemic
ed(s).	=	editor(s)
e.g.	=	exempli gratia (for example)
EIS	=	Environmental Impact Statement
ELMR	=	Estuarine Living Marine Resources
ERF	=	Estuarine Research Federation
EO	=	Executive Order
ESA	=	Endangered Species Act
est.	=	estimate
et al.	=	et alii (and others)
et seq.	=	et sequens (and the following)
etc.	=	et cetera (and others)
F	=	Fahrenheit

FLIR	=	Forward Looking Infrared Radar
Fms.	=	Formations
FORSCOM	=	Forces Command
Ft.	=	Feet
FWR	=	Federal Wildlife Refuge
GAO	=	General Accounting Office
GBNEP	=	Galveston Bay National Estuary Program
GLO	=	General Land Office
HHS	=	Health and Human Services
HIDTA	=	High Intensity Drug Traffic Area
hr.	=	hour
HRMN	=	Houston Regional Monitoring Network
IAQCR	=	Intrastate Air Quality Control Region
IBWC	=	International Boundary and Water Commission
i.e.	=	id est (that is)
IIRIRA	=	Illegal Immigration Reform and Immigrant Responsibility Act
INS	=	Immigration and Naturalization Service
IRP	=	Installation Restoration Program
ISIS	=	Integrated Surveillance and Intelligence Systems
ITP	=	Industrial Toxic Project
JCS	=	Joint Chiefs of Staff
JTF-6	=	Joint Task Force Six
L_{dn}	=	day-night average noise level
LAPS	=	Land Acquisition Priority System
lbs.	=	pounds
LMV	=	Lower Mississippi Valley
LP/OP	=	Listening Post/Observation Post
LPUST	=	Leaking Petroleum Underground Storage Tank
L.R.G.V.	=	Lower Rio Grande Valley
LUST	=	Leaking Underground Storage Tank
M	=	Mixing zone
Max.	=	Maximum
MBAS	=	Methylene Blue-Activated Substances
MBTA	=	Migratory Bird Treaty Act
METL	=	Mission Essential Task List
Min.	=	Minimum
mg/l	=	milligrams per liter
MOU	=	Memorandum of Understanding
mph	=	miles per hour
mrem	=	millirems
MSA	=	Metropolitan Statistical Area
m.y.	=	million years
NA	=	Non-attainment
N/A	=	Not Applicable
NAAQS	=	National Ambient Air Quality Standards
NAMS	=	National Air Monitoring Stations
NAS	=	Naval Air Station
NASA	=	National Aeronautics and Space Administration
NCPDI	=	National Coastal Pollutant Discharge Inventory
n.d.	=	no date
ND	=	No Data

NEP	=	National Estuary Program
NEPA	=	National Environmental Policy Act
NHS	=	National Historical Site
NMED	=	New Mexico Environment Department
No.	=	Number
NO_x	=	Nitrous Oxides
NO_2	=	Nitrogen Dioxide
NOAA	=	National Oceanic and Atmospheric Administration
NOS	=	National Ocean Service
NPDES	=	National Pollutant Discharge Elimination System
NPL	=	National Priorities List
NPS	=	National Park Service
NRCS	=	Natural Resources Conservation Service
NRHP	=	National Register of Historic Places
NWPCP	=	National Wetland Priority Conservation Plan
NWI	=	National Wetland Inventory
NWR	=	National Wildlife Refuge
O_3	=	Ozone
ONDCP	=	Office of National Drug Control Policy
OTF	=	Ozone Task Force
p	=	pages
part.	=	particulates
Pb	=	Lead
PCB	=	Polychlorinated Biphenyl
pCi/l	=	picocuries per liter
PE	=	Proposed Endangered
PEIS	=	Programmatic Environmental Impact Statement
pH	=	hydrogen-ion concentration
P.L.	=	Public Law
PM	=	Particulate Matter
PM_{10}	=	Particulate Matter less than 10 microns in diameter
POC	=	Point of Contact
POE	=	Port of Entry
POL	=	Petroleum, Oils, and Lubricants
ppm	=	parts per million
PSD	=	Prevention of Significant Deterioration
PSI	=	Pollutant Standard Index
PVT	=	Private
RCRA	=	Resource Conservation and Recovery Act
RCRIS	=	Resource Conservation and Recovery Information System
REC	=	Record of Environmental Consideration
Rep.	=	Report
ROW	=	Right-of-way
RVS	=	Remote Video Surveillance
S	=	Seawater zone
SARA	=	Superfund Amendments and Reauthorization Act
SCS	=	Soil Conservation Service
SECDEF	=	Secretary of Defense
SEDESOL	=	Secretariat for Social Development
SEDUE	=	Secretaria de Desarrollo y Ecologia
SENARNAP	=	Secretariat for Environment, Natural Resources and Fisheries

SETRPC	=	South East Texas Regional Planning Commission
SHP	=	State Historical Park
SHPO	=	State Historic Preservation Officer
SHS	=	State Historical Structure or Site
SIP	=	State Implementation Plan
SLAMS	=	State/Local Air Monitoring Stations
SO_2	=	Sulfur Dioxide
SO_x	=	Sulfur Oxides
SPCCP	=	Spill Prevention, Control and Countermeasures Plan
SPEIS	=	Supplemental Programmatic Environmental Impact Statement
spp.	=	species
sq.	=	square
SRA	=	State Recreational Area
SSA	=	Secretariat of Health
SWB	=	Storm Water Board
SWP	=	State Water Project
SWPPP	=	Stormwater Pollution Prevention Plan
SWRCB	=	California Stormwater Resources Control Board
T/SA	=	Threatened due to similarity of appearance
TAC	=	Texas Antiquities Code
TACB	=	Texas Air Control Board
TACP	=	Tactical Air Control Procedure
TDF	=	Temporary Detention Facility
TDS	=	Total Dissolved Solids
TMDL	=	Total Maximum Daily Loading
TNRCC	=	Texas Natural Resources Conservation Commission
TOC	=	Tactical Operations Center
TOXNET	=	Toxicology Data Network
TPHC	=	Total Petroleum Hydrocarbons
TPWD	=	Texas Parks and Wildlife Department
TRI	=	Toxic Release Inventory
TSF	=	Temporary Staging Facility
TSP	=	Total Suspended Particulate
TSWQS	=	Texas Surface Water Quality Standards
TWC	=	Texas Workforce Commission
U/A	=	Unclassified/Attainment
UATMP	=	Urban Air Toxics Monitoring Program
UIC	=	Underground Injection Control
U.S.	=	United States
USACE	=	U.S. Army Corps of Engineers
USACOM	=	U.S. Atlantic Command
UAV	=	Unmanned Aerial Vehicle
USBP	=	U.S. Border Patrol
U.S.C.	=	U.S. Code
USDA	=	U.S. Department of Agriculture
USDI	=	U.S. Department of the Interior
USEPA	=	U.S. Environmental Protection Agency
USFS	=	U.S. Forest Service
USFWS	=	U.S. Fish and Wildlife Service
USGS	=	U.S. Geological Service
USN	=	U.S. Navy

UST	=	Underground Storage Tank
var.	=	variety
VOC	=	Volatile Organic Compound
WMA	=	Wildlife Management Area
WQARF	=	Water Quality Assurance Revolving Fund
yr.	=	year

SECTION 9.0
REFERENCES

9.0 REFERENCES

American Rivers. 1993. Endangered and Threatened Rivers of the United States. American Rivers, Washington D.C. 25pp.

Black, S.L.1989. South Texas Plains. In *From the Gulf to the Rio Grande: Human Adaptation in Central, South, and Lower Pecos Texas,* pp. 39-62, by T.R. Hester, S.L. Black, D.G. Steele, B.W. Olive, A.A. Fox, K.J. Reinhard, and L.C. Bement. Arkansas Archeological Survey Research Series No. 33. Center for Archaeological Research at the University of Texas at San Antonio, Texas A&M University, and the Arkansas Archeological Survey.

Brown, D.E. (ed.), 1994. *Biotic Communities of the Desert Southwest—United States and Mexico*. Special issue of the *Desert Plants*, Boyce Thompson Southwestern Arboretum, Volume 4. Numbers 1-4, 1992 (2nd Printing).

Bousman, C.B., S.A. Tomka, and G.L. Bailey. 1990. *Prehistoric Archeology and Paleoenvironments in Hidalgo and Willacy Counties: Results of the Phase II Test Excavations. TAC Permit 784. Prewitt and Associates, Inc. Reports of Investigations 76. Austin.*

Byrne, R. 1979. Archaeology and California's Climate. *Journal of California and Great Basin Anthropology* 1(1):196-198.

Campbell, E.W.C. 1936. Archaeological Problems in the Southern California Deserts. *American Antiquity* 1(4):295-300.

Collins, M.B. and C.B. Bousman. 1990. *Cultural Implications of Late Quaternary Environmental Change in Northeast Texas.* Unpublished manuscript on file at the Texas Historical Commission, Austin.

Christenson, L.E.. 1990. *The late Prehistoric Yuman People of San Diego County, California: Their Settlement and Subsistence System.* Unpublished Ph.D. dissertation, Arizona State University, Flagstaff.

Council on Environmental Quality, 1997. Considering Cumulative Effects, Under the National Environmental Policy Act. Executive Office of the President, Washington, D.C.

Eighmey, J.D. 1990. *A Phase I Archaeological Study for the Proposed State Route 86 Widening and Bridge Replacement from Kane Springs to Brawley.* Recon Regional Environmental Consultants, San Diego.

Ellingwood, K. and D. Schoch, 1998. In *Push to Secure Border, Risk to Rare Species Seen*. Articled published in the *Los Angeles Times,* Sunday, August 16, 1998.

Ellis, D.H. 1988. Effects of Aircraft Noise and Sonic Booms on Fish and Wildlife: Results of a Survey of U.S. Fish and Wildlife Service Endangered Species and Ecological Services Field Offices, Refuges, Hatcheries, and Research Centers. NERC 88/30.

Ellis, D.H. and D.P. Mindell, 1991. *Raptor Responses to Low-level Jet Aircraft and Sonic Booms.* In *Environmental Pollution*, Volume 74 (1991) pp. 53-83.

Ervin, N. 1998. *Where Wilderness Meets La Migra*. Article published in *The Sierra Club Activist Resource Planet*, Volume 5, Number 10, December 1998.

Finch, D.M. and J.A. Tainter, (tech. eds.) 1995. Ecology, Diversity and Sustainability of the Middle Rio Grande Basin. General Technical Report RM-GTR-268. Fort Collins, CO. U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station.

Frazer, R.W. 1965. *Forts of the West: Military Forts and Presidios and Posts Commonly Called Forts West of the Mississippi River to 1898.* University of Oklahoma Press, Norman.

Hedrick, J.A. 1989. A preliminary Report on Archeological Resources in Southern Culberson County in the Vicinity of Van Horn, Texas. *Bulletin of the Texas Archeological Society* 59:129-156.

Hedrick, J.A. 1989. A preliminary Report on Archeological Resources in Southern Culberson County in the Vicinity of Van Horn, Texas. *Bulletin of the Texas Archeological Society 59:129-156.*

Heizer, R.F. and A.B. Elsasser 1980. The Natural World of California Indians. University of California Press, Berkeley and Los Angeles, California.

Hervert, John 1999. Personal Communication with Kim Rightmire (WLA), Steve Smith and Chris Ingram, Gulf South Research Corporation, and Mr. Hervert, State Endangered Species Specialist, Arizona Department of Game and Fish, Phoenix, Arizona, June 9, 1999.

Hester, T.R. 1980. *Digging into South Texas Prehistory.* Corona Publishing Company, San Antonio.

Hester, T.R. 1981. Tradition and Diversity Among the Prehistoric Hunters and Gatherers of Southern Texas. *Plains Anthropologist* 26(92):119-128.

Hester, T.R. 1989. An Archeological Synthesis. In *From the Gulf to the Rio Grande: Human Adaptation in Central, South, and Lower Pecos Texas*, pp. 115-128, by T.R. Hester, S.L. Black, D.G. Steele, B.W. Olive, A.A. Fox, K.J. Reinhard, and L.C. Bement. Arkansas Archeological Survey Research Series No. 33. Center for Archaeological Research at the University of Texas at San Antonio, Texas A&M University, and the Arkansas Archeological Survey.

James, Daniel. 1991. *Illegal Immigration-An Unfolding Crisis*. University Press of America, Inc. Lanham, Maryland.

Joint Task Force-Six. 1994a. Environmental Baseline: Texas Gulf Coast (Volume 1), Texas Land Border (Volume 2), New Mexico Land Border (Volume 3), Arizona Land Border (Volume 4), and California Land Border (Volume 5). Prepared by U.S. Army Corps of Engineers, Fort Worth District, Fort Worth, Texas.

Krausman, P.R., M.C. Wallace, M.J. Zine, L.R. Berner, C.L. Hayes, and D.W. DeYoung, 1993. The Effects of Low-altitude Aircraft on Mountain Sheep Heart Rate and Behavior. Noise and Sonic boom Impact Technology Program (NSBIT), AL/OEBN, Human Systems Center, Air Force Materiel Command, Brooks Air Force Base, Texas.

Martin, P.S. and F. Plog. 1973. *The Archaeology of Arizona: A Study of the Southwest Region.* Doubleday/Natural History Press. American Museum of Natural History, Garden City, New York.

Martynec, R.S. and D.E. Peter. 1992. *Cultural Resources Monitoring Survey of the Douglas-Naco, Arizona Sector of the U.S. Mexican Border (draft).* Miscellaneous Report of Investigations No. 36. Geo-Marine, Inc., Plano, Texas. Submitted to the U.S. Army Corps of Engineers, Fort Worth District.

Martynec, R.S., S.N. Allday, and D.E. Peter. 1992. *Cultural Resources Survey/Monitoring of a JTF-6 Action, Tohono O'odham Sector, Arizona* (draft). Miscellaneous Report of Investigations No. 39. Geo-Marine, Inc., Plano, Texas. Submitted to the U.S. Army Corps of Engineers, Fort Worth District.

Moratto, M.J. 1984. California Archeology. Academic Press, Inc., San Diego.

Moratto, M.J., T.F. King, and W.B. Woolfenden. 1978. Archaeology and California's Climate. *The Journal of California Anthropology* 5:2.

New Mexico Department of Game and Fish. 1998. New Mexican Wildlife of Concern – Status and Distribution. Information provided by Biota Information System of New Mexico (Bison-M). May 8, 1998.

Office of National Drug Control Policy. 1998. *The National Drug Control Strategy, 1998. A Ten Year Plan*. Barry R. McCaffrey, Director. Washington, D.C.

Raptor Research Foundation 1996. Suggested Practices for Raptor Protection on Powerlines. University of Minnesota, St. Paul, Minnesota.

Rivera-Batiz, Francisco, Selig Sechzer, and Ira Gang. 1991. U.S. Immigration Policy Reform in the 1980's-A Preliminary Assessment. Praeger Publishers, New York, New York.

San Diego County. 1998. Final Multiple Species Conservation Program – MSCP Plan. San Diego, California.

Schroeder, A.H. 1961. *The Archaeological Excavations at Willow Beach, Arizona, 1950.* Anthropological Papers 50. University of Utah, Salt Lake City.

Texas Natural Resource Conservation Commission, 1994. *1994 Regional Assessment of Water Quality in the Rio Grande Basin.* Watershed Management Division, Austin, Texas.

Texas Parks & Wildlife Department. 1998. Texas Biological and Conservation Data System. TPWD, Endangered Resources Branch. County Lists of Texas Special Species. October 14, 1998.

U.S. Army. 1985. White Sands Missile Range, Installation Environmental Assessment. WSMR, New Mexico. Prepared by U.S. Army Corps of Engineers, Fort Worth District.

U. S. Army. 1994a. Construction Engineering Research Laboratory. Economic Impact Forecast System. Champaign-Urbana, Illinois.

U.S. Army. 1994b. Programmatic Environmental Impact Statement for JTF-6 Activities Along the U.S./Mexico Border. USACE, Fort Worth District, Fort Worth, Texas.

U.S. Army. 1996. Restoration and Monitoring of Vernal Pools, Otay Mesa, San Diego County, California. USACE, Fort Worth District, Fort Worth, Texas.

U.S. Army. 1998a. Final Environmental Assessment for Construction of Barrier Systems along a 1.6-mile Corridor of the U.S./Mexico International Boundary (Spring Canyon) in San Diego, California. USACE, Fort Worth District, Fort Worth, Texas.

U.S. Army. 1998b. Draft Environmental Assessment of the U.S. Border Patrols Operation Rio Grande. USACE, Galveston District, Galveston, Texas.

U.S. Army. 1998c. Programmatic EIS for International Bridge Crossings along the U.S./Mexico Border, from El Paso to Brownsville, Texas. USACE, Fort Worth District, Fort Worth, Texas.

U. S. Border Patrol. 1998. Results of enforcement program conducted by Laredo Sector/Carrizo Springs Station. Personal communication between the USBP Station Chief and Mr. Chris Ingram, GSRC, November 4, 1998.

U.S. Department of the Interior. 1995. *Lower Rio Grande Basin Study, Texas. Summary of Water Resources, Ecological Resources, and Socioeconomic Conditions*. Bureau of Reclamation, Austin, Texas.

U.S. Department of the Interior. 1998. National Park Service, Wild and Scenic River Homepage. Located at http://www.nps.gov/rivers/wildriverlist.ntml. August 7, 1998.

U.S. Environmental Protection Agency. 1999. Endangered Rivers Internet website located at: www.epa.gov/rivers/98rivers/riogrande.html

U.S. Department of Justice. 1998. U.S. Border Patrol, Yuma Sector, Wellton Station, Yuma, Arizona, Biological Assessment. Prepared by Louis Berger & Associates, Inc. for USDOJ, Immigration and Naturalization Service, Washington, D.C.

U.S. Government Printing Office. 1994. The Impact of Federal Immigration Policy and INS Activities on Communities. Hearings before the Information, Justice, Transportation, and Agriculture Subcommittee of the Committee on Government Operations, U.S. House of Representatives.

Von Werlhof, J. 1980. *An Archaeological Overview of San Sebastion Village, Imperial County, California.* M.S. thesis on file, Imperial Valley College Barker Museum, El Centro.

Wallace, W.L., E.S. Taylor, and G. Kritzman. 1962. Additional Excavations at the Indian Hill Rockshelter, Anza-Borrego Desert State Park. In *Archaeological Explorations in the Southern Section of Anza-Borrego Desert State Park*, by W.J. Wallace. Archaeological Reports 5. California Department of Parks and Recreation. Sacramento.

Zimring, Franklin and Gordon Hawkins. 1992. *The Search for Rational Drug Control.* Cambridge University Press, New York, New York.

SECTION 10.0
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10.0 INDEX

APPENDIX A
PUBLIC INVOLVEMENT

Reuse, Implementation, King County, NY.

Summary: Previous concerns identified at the draft EIS were satisfactorily addressed in the final EIS, therefore EPA has no objection to the action as proposed.

ERP No. FS–NPS–E61066–FL Big Cypress National Preserve, General Management Plan, Implementation, New Information on the Special Alternative for the Off-Road Vehicle Management Plan, Collier, Dade and Monroe Counties, FL.

Summary: EPA expressed continuing concerns regarding surface water quality.

Dated: October 17, 2000.

Joseph C. Montgomery,

Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. 00–27063 Filed 10–19–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[ER–FRL–6611–8]

Environmental Impact Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 564–7167 OR www.epa.gov/oeca/ofa

Weekly receipt of Environmental Impact Statements

Filed October 09, 2000 Through October 13, 2000

Pursuant to 40 CFR 1506.9.

EIS No. 000347, Final EIS, NPS, ID, MT, WY, MT, WY, Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr. Memorial Parkway Winter Use Plan, Implementation, Fremont County, ID, Gallatin and Park Counties, MT and Park and Teton Counties, WY, Due: November 20, 2000, Contact: Clifford Hawkes (303) 969–2262.

EIS No. 000348, Final EIS, FHW, WV, MD, VA, US 522 Upgrade and Improvements Project, From the Virginia State Line through Morgan County to the Maryland State Line, Funding, NPDES and COE Section 404 Permit, Berkeley Springs, Morgan County, WV, Due: December 15, 2000, Contact: Thomas Smith (304) 347–5928.

EIS No. 000349, Draft EIS, AFS, ID, Curfew National Grassland Land and Resource Management Plan, Implementation, Caribou-Targhee National Forest, Oneida County, ID, Due: January 29, 2001, Contact: Jack Blackwell (801) 625–5605.

EIS No. 000350, Final EIS, NPS, KS, Tallgrass Prairie National Preserve General Management Plan, Implementation, Flint Hills Region, Chase County, KS, Due: November 20, 2000, Contact: Steve Miller (316) 273–6034.

EIS No. 000351, Final EIS, NPS, MN, WI, Lower Saint Croix National Scenic Riverway Cooperative Management Plan, Implementation, MN and WI, Due: November 20, 2000, Contact: Michael Madell (608) 441–5600.

EIS No. 000352, Final EIS, BLM, Programmatic EIS—Surface Management Regulations for Locatable Mineral Operation, (43 CFR 3809), Public Land, Due: November 20, 2000, Contact: Paul McNutt (775) 861–6604.

EIS No. 000353, Draft EIS, JUS, WA, Tacoma/Seattle Area Detention Center, Construction and Leasing, Pierce County, WA, Due: December 04, 2000, Contact: Eric Verwers (817) 978–0202.

EIS No. 000354, Draft EIS, FHW, NJ, NJ–52(1) Causeway (known as MacArthur Boulevard) Construction Project, between NJ–9 in Somers Point, Atlantic County to Bay Avenue in Ocean City, Cape May County, Funding, COE Section 404 and 10 Permits, USCG Permit, Atlantic and Cape May Counties, NJ, Due: December 05, 2000, Contact: Gene Amparano (609) 637–4234.

EIS No. 000355, Final EIS, AS, CA, 64-Acre Tract Intermodal Transit Center, Construction and Operation, Lake Tahoe Basin Management Unit, Tahoe City, Placer County, CA, Due: November 20, 2000, Contact: Joe Oden (530) 573–2653.

EIS No. 000356, Draft EIS, FHW, NY, NY–22 Transportation Improvement, from I–684 to north of County Road 65, Doansburg Road, Construction, COE Section 404 Permit, Town of Southeast, Putnam County, NY, Due: December 04, 2000, Contact: Harold J. Brown (518) 431–4127.

EIS No. 000357, Final EIS, COE, MS, TN, MS, TN, Wolf River Ecosystem Restoration, Memphis, Tennessee Feasibility Study, Marshall, Benton and Tippah Counties, MS and Shelby, Fayette and Harderman, TN, Due: November 20, 2000, Contact: Richard Hite (901) 544–0706.

EIS No. 000358, Draft Supplement, BLM, CA, Cadiz Groundwater Storage and Dry-Year Supply Program, Amendment of the California Desert Conservation Area Plan, Additional Information, Groundwater Monitoring and Management Program, Issuance of Right-of-Way Grants and Permits, San Bernardino County, CA, Due: December 04, 2000, Contact: James Williams (909) 657–5390.

EIS No. 000359, Draft EIS, USN, CA, Naval Station (NAVSTA) San Diego Replacement Pier and Dredging Improvements, Construction, Dredging and Dredged Material Disposal, San Diego Naval Complex, San Diego, CA, Due: December 04, 2000, Contact: Grace S. Penafuerte (619) 556–7773.

EIS No. 000360, Draft Supplement, NRC, Generic—License Renewal of Nuclear Plants, Arkansas Nuclear One, Unit 1, COE Section 10 and 404 Permits, Pope County, AR (NUREG–1437), Due: January 04, 2001, Contact: Thomas Kenyon (301) 415–1120.

EIS No. 000361, Draft Supplement, FTA, WA, Central Link Light Rail Transit Project, (Sound Transit), Construction and Operation, Alternative Route Considered, Tukwila Freeway Route, COE Section 10 and 404 Permits, Cities of Tukwila, SeaTac, Seattle, King County, WA, Due: December 04, 2000, Contact: John Witmer (206) 220–4463.

EIS No. 000362, Draft EIS, GSA, DC, Bureau of Alcohol, Tobacco and Firearms National Headquarters Building, Site Acquisition, Design and Construction, Washington, D.C., Due: December 04, 2000, Contact: Dawud Abdur-Rahman (202) 260–3368.

Amended Notices

EIS No. 000320, Draft EIS, AS, AK, Chugach National Forest, Proposed Revised Land and Resource Management Plan, Implementation, Glacier, Seward and Cordora Ranger Districts, Kenai Peninsula Borough, AK, Due: December 14, 2000, Contact: Dave Gibbons (907) 271–2500. Revision of FR notice published on 09/15/2000: CEQ Comment Date corrected from 10/30/2000 to 12/14/2000.

EIS No. 000333, Second Draft Supple, JUS, TX, AZ, NM, CA, Programmatic—Revised Draft Supplemental EIS US Naturalization Service (INS) and US Joint Task Force-Six (JTF–6) Activities Along the US/Mexico Border from Brownsville, Texas to San Diego, California, Due: November 13, 2000, Contact: Eric Verwers (817) 978–0202. Revision of FR notice published on 09/29/2000: Correction of Status from Revised Draft to Revised Draft Supplemental EIS and Title Correction.

Dated: October 17, 2000.

Joseph C. Montgomery,

Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. 00–27064 Filed 10–19–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[OPP–34223A; FRL–6751–1]

Malathion; Revised Pesticide Risk Assessment; Notice of Public Meeting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: EPA will hold a public meeting to present the revised risk assessment for the organophosphate pesticide malathion to interested stakeholders. This public meeting, called a ''Technical Briefing,'' will provide an opportunity for stakeholders to learn about the data, information, and methodologies that the Agency used in revising its risk assessment for malathion. In addition, representatives of the Department of Agriculture (USDA) will also be present to discuss malathion risks.

DATES: The technical briefing will be held on, November 9, 2000, from 9:00 a.m. to 5:00 p.m.

ADDRESSES: The technical briefing will be held at the Radisson Hotel, Old Town Alexandria, 901 N. Fairfax St., Alexandria, VA 22314, telephone number: (703) 683–6000.

FOR FURTHER INFORMATION CONTACT: By mail: Patricia Moe, Special Review and Registration Division (7508C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (703) 308–8011; e-mail address: moe.patricia@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

This action applies to the public in general. As such, the Agency has not attempted to specifically describe all the entities potentially affected by this action. The Agency believes that a wide range of stakeholders will be interested in technical briefings on organophosphate pesticides, including environmental, human health, and agricultural advocates, the chemical industry, pesticide users, and members of the public interested in the use of pesticides on food. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT.**

B. How Can I Get Additional Information, Including Copies of this Document and Other Related Documents?

1. *Electronically*. You may obtain electronic copies of this document, and certain other related documents that might be available electronically, from the EPA Internet Home Page at http://www.epa.gov/. To access this document, on the Home Page select ''Laws and Regulations'', ''Regulations and Proposed Rules,'' and then look up the entry for this document under the ''**Federal Register**—Environmental Documents.'' You can also go directly to the **Federal Register** listings at http://www.epa.gov/fedrgstr/.

To access information about organophosphate pesticides, you can also go directly to the Home Page for the Office of Pesticide Programs (OPP) at http://www.epa.gov/pesticides/op/. In addition, a brief summary of the malathion revised risk assessment is now available at http://www.epa.gov/pesticides/op/status.htm/, as well as in paper as part of the public version of the official record as described in Unit I.B.2.

2. *In person*. The Agency has established an official record under docket control number OPP–34223A. The official record consists of the documents specifically referenced in this action, and other information related to this action, including any information claimed as Confidential Business Information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period is available for inspection in the Public Information and Records Integrity Branch (PIRIB), Rm. 119, Crystal Mall #2, 1921 Jefferson Davis Hwy., Arlington, VA, from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The PIRIB telephone number is (703) 305–5805.

II. What Action is the Agency Taking?

This document announces the Agency's intention to hold a technical briefing for the organophosphate pesticide, malathion. The Agency is presenting the revised risk assessments for malathion to interested stakeholders. This technical briefing is designed to provide stakeholders with an opportunity to become even more informed about an organophosphate's risk assessment. EPA will describe in detail the revised risk assessment: Including the major points (e.g., contributors to risk estimates); how public comment on the preliminary risk assessment affected the revised risk assessment; and the pesticide use information/data that was used in developing the revised risk assessment. Stakeholders will have an opportunity to ask clarifying questions. In addition, representatives of the USDA will be present to discuss malathion risks.

The technical briefing is part of the pilot public participation process that EPA and USDA are now using for involving the public in the reassessment of pesticide tolerances under the Food Quality Protection Act (FQPA), and the reregistration of individual organophosphate pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The pilot public participation process was developed as part of the EPA-USDA Tolerance Reassessment Advisory Committee (TRAC), which was established in April 1998 as a subcommittee under the auspices of EPA's National Advisory Council for Environmental Policy and Technology. A goal of the pilot public participation process is to find a more effective way for the public to participate at critical junctures in the Agency's development of organophosphate pesticide risk assessment and risk management decisions. EPA and USDA began implementing this pilot process in August 1998 in response to Vice President Gore's directive to increase transparency and opportunities for stakeholder consultation.

On the day of the technical briefing, in addition to making copies available at the meeting site, the Agency will also release for public viewing the malathion revised risk assessments and related documents to the Public Information and Records Integrity Branch and the OPP Internet web site that are described in Unit I.B.1. In addition, the Agency will issue a **Federal Register** notice to provide an opportunity for a 60–day public participation period during which the public may submit risk management and mitigation ideas and recommendations and proposals for transition.

List of Subjects

Environmental protection, Chemicals, Pesticides and pests.

Revised Draft Supplemental Programmatic Environmental Impact Statement For INS and JTF-6 Activities

AGENCY: The Immigration and Naturalization Service, U.S. Department of Justice

ACTION: Notice of Availability of the Revised Draft Supplemental Programmatic Environmental Impact Statement

SUMMARY: This Notice has been prepared to inform interested parties that the Immigration and Naturalization Service has released the Revised Draft Supplemental Programmatic Environmental Impact Statement (DSPEIS) for INS and JTF-6 activities which are intended to are intended to facilitate and enhance INS law enforcement strategies. This draft is updated and revised from a draft that was released for public review in 1999. The draft has been revised to clarify the scope of the document. Comments received during the public review period of the original draft have been incorporated, as appropriate, into the revised draft document.

DATES: Written comments and suggestions must be received no later than 45 days after the U.S. Environmental Protection Agency posts the availability in the Federal Register.

ADDRESSES: Copies have been prepared and distributed to regional and local libraries within and near the study area. Electronic copies (CD-ROM) of the DSPEIS can be obtained by written request to U.S. Army Corps of Engineers, Fort Worth District, INS A/E Resource Center, ATTN: CESWF-PM-INS, P.O. Box 17300, Fort Worth, Texas 76102-0300. The document may be viewed or downloaded through the Corps of Engineers, Fort Worth District web site at the following web site address:

www.swf.usace.army.mil/INS/PEIS/default.htm.

Send written comments on the Final SPEIS to Mr. Eric Verwers, Assistant Director, at the address listed above. Electronically transmitted comments will not be accepted. Mr. Verwers can be contacted for additional information at 817-978-0202.

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NOTICE OF AVAILABILITY

DRAFT SUPPLEMENTAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR INS AND JTF-6 ACTIVITIES

The Public is invited to comment on the Draft Supplemental Programmatic Environmental Impact Statement (SPEIS) for the Immigration and Naturalization Service and Joint Task Force Six activities. The SPEIS addresses past, on-going and future actions undertaken by INS and JTF-6 throughout the continental U.S., but focuses on projects along the U.S./Mexico border. The Draft SPEIS is available for review at the Internet website at www.swf.usace.army.mil/ins/peis/default.htm or at the following local libraries: Hidalgo County Library, Harlingen Public Library, Mercedes Memorial Library, Donna Public Library, University of Texas at Brownsville, Texas State Technical College, and Weslaco Public Library. Written comments must be received no later than May 10, 1999. Send written comments to Mr. Eric Verwers, Assistant Director, INS A/E Resource Center, U.S. Army Corps of Engineers, Fort Worth District, P.O. Box 17300, Fort Worth, Texas 76102-0300. Or call Mr. Verwers at 817-978-0202 for further information.

LEGAL NOTICE

Legal Notice

NOTICE OF AVAILABILITY DRAFT SUPPLEMENTAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR INS AND JTF-6 ACTIVITIES

The public is invited to comment on the Draft Supplemental Programmatic Environmental Impact Statement (SPEIS) for the Immigration and Naturalization Service and Joint Task Force Six activities. The SPEIS addresses past, on-going and future actions undertaken by INS and JTF-6 throughout the continental U.S., but focuses on projects along the U.S./Mexico border. The Draft SPEIS is available for review at the Internet website at www.swf.usace.army.mil/ins/speis/default.htm or at the following local libraries: Deming Public Library, Thomas Bamigan Memorial Library, Silver City Public Library, Western New Mexico University and Hidalgo County Library (Lordsburg). Written comments must be received no later than 10 May 1999. Send written comments to Mr. Eric Verwers, Assistant Director, INS A/E Resource Center, U.S. Army Corps of Engineers, Fort Worth District, P.O. Box 17300, Fort Worth, Texas 76102-0300. Or call Mr. Verwers at 817 978-0202 for further information. (No.9304-113-26)

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STATE OF NEW MEXICO
COUNTY OF LUNA

I, Mildred Hillesheim, do solemnly swear that I am the Publisher of the Deming Headlight published at Deming, Luna County, New Mexico, and that the article, a copy of which is hereto attached, was published in said Headlight for 1 time(s) consecutively.

First publication being on the 26th day of March, 1999.

DEMING HEADLIGHT

By Mildred Hillesheim

Sworn to and subscribed before me the 26th day of March, 1999

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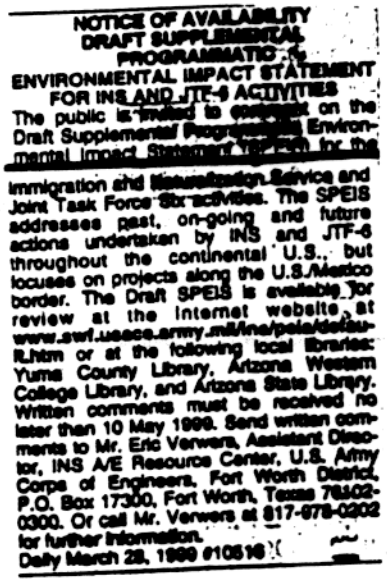

NOTICE OF AVAILABILITY
DRAFT SUPPLEMENTAL
PROGRAMMATIC
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The public is invited to comment on the Draft Supplemental Programmatic Environmental Impact Statement (SPEIS) for the Immigration and Naturalization Service and Joint Task Force Six activities. The SPEIS addresses past, on-going and future actions undertaken by INS and JTF-6 throughout the continental U.S., but focuses on projects along the U.S./Mexico border. The Draft SPEIS is available for review at the Internet website at www.swf.usace.army.mil/ins/peis/deisu-R.htm or at the following local libraries: Yuma County Library, Arizona Western College Library, and Arizona State Library. Written comments must be received no later than 10 May 1999. Send written comments to Mr. Eric Verwers, Assistant Director, INS A/E Resource Center, U.S. Army Corps of Engineers, Fort Worth District, P.O. Box 17300, Fort Worth, Texas 76102-0300. Or call Mr. Verwers at 817-978-0202 for further information.
Daily March 28, 1999 #10516

Samuel J. Pepper or Lee Knapp, having been first duly sworn, deposes and says: that The Yuma Daily Sun is a newspaper of general circulation published daily in the City of Yuma, County of Yuma, State of Arizona; that he is the publisher or business manager of said paper; that the

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Lee Knapp

Subscribed and sworn to before me, by the said Samuel J. Pepper or Lee Knapp

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VIRGEN P PEREZ
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That she is the Secretary of the Sierra Vista Herald and the Bisbee Daily Review, newspapers published six days a week in Bisbee and Sierra Vista, Cochise County, State of Arizona

Notice of Availability of Draft Supplemental Programmatic Enviornmental Impact Statement for INS and JTF-6 Activities

a copy of which is hereto attached, was published in its issues for 1 times on the following dates:

March 28, 1999

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DRAFT SUPPLEMENTAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT
FOR INS AND JTF-6 ACTIVITIES

The public is invited to comment on the Draft Supplemental Programmatic Environmental Impact Statement (SPEIS) for the Immigration and Naturalization Service and Joint Task Force Six activities. The SPEIS addresses past, on-going and future actions undertaken by INS and JTF-6 throughout the continental U.S., but focuses on projects along the U.S./Mexico border. The Draft SPEIS is available for review at the Internet website at www.swl.usace.army.mil/tha/pea/default.htm or at the following local libraries: Cochise College Library, Nogales City-Santa Cruz county Library, Tucson-Pima Library, Pima Community College, and University of Arizona Library. Written comments must be received no later than 10 May 1999. Send written comments to Mr. Eric Verwers, Assistant Director, INS A/E Resource Center, U.S. Army Corps of Engineers, Fort Worth District, P.O. Box 17300, Fort Worth, Texas 76102-0300. Or call Mr. Verwers at 817-978-0202 for further information.

Publish: March 28, 1999

Subscribed and sworn to me this 28th day of March, 19 99

[signature]
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